

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01321

SEQUENCE DESCRIPTION:

GATCAGTGCT CTCTATTGAT GTTCTTGCTG GTCTCCAGNC ACATTCCTGT TGCATTAAGN 60
 CTTGAAAGAC TTGTAGATGT GTGATGTTCA GGCACAGGAT GCTGNAAGTA TGTTACTATT 120
 CTNAGTTTGT AAATTGTCCT TTTGATACCA TCATCTNGTT TTCTTTTGT AGGTATAAAT 180
 AAAANCACTG TTGNCANTAA GGAAA 205

SEQ ID NO:1176

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01322

SEQUENCE DESCRIPTION:

GATCTCAGCC ATAAAGTGCC AGTTTGCTTA GTTCTCACTG TCTCCTGGTC TGTGCTGCCC 60
 TGCTCTGGGG ATGCACGGCG GCAGGGTGGG GGAGGGAGGT TCCTCGCAGG TCTCAGCCCCG 120
 GGACAGGGTC TTGCAAGCAG CCTCCTGGGC AGTCGTAAGG GTTGGGGCGT GATGTCTTCA 180
 ATAAATTAAG TTTTATTGG AAA 203

SEQ ID NO:1177

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01323

SEQUENCE DESCRIPTION:

GATCAAAATG AAACAAATAT ACCTTATCCT AAAGAGCTCA TAACAAATAA GTTACCTCCA 60
 CTCTATAAAC TCAGACCTAC TTTTGAAGA TAACTGCTTT TAACCTCTCC TTACAAGATT 120
 TTTGTTGTTG ATGTATTTAA TTTTAGCCCA TGTCTCAATT CTCATTTTCA AAGAATCAAT 180
 ATATTAATAT ACCTTTGGTC AAA 203

SEQ ID NO:1178

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01324

SEQUENCE DESCRIPTION:

GATCGCTCTT GTGTTTTTGC ACTATTAATT AACTTCAAGT GCAATTTTGG CAGGCAGGCC 60
 AAGGGTCTCA ACAGGCTATT TGGAATGAGT TCTCTTTTAA GGCCTTCAAC GTAGTNNGAC 120
 ATTTTCAAAT CAAAAAGTAC AGCAGGAGCC AGCCTTTATT TTGTCTGTGT ACACAATAAA 180
 ATATTCCGCT TCTATAGGCA AA 202

SEQ ID NO:1179

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01325

SEQUENCE DESCRIPTION:

GATCAGCTGA AGGTTTCATGG GTTTTAAGTG CTTGTGGCTC ACTGAAGCTT AAGTTAGGAT 60
 TTCNTTGCAA TGAGTAGAAT TTCCTTCTT TCCCTTGTC AAGGTTTAAA AACCTCACAG 120
 CTTGTATAAT GTAACCATTT GGGGTCCGCT TTAACTTGG ACTAGTGTA CTCCTTCATG 180
 CAATAAACTG AAAAGAGCCA TGCTGTCTAA A 211

SEQ ID NO:1180

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01326

SEQUENCE DESCRIPTION:

GATCCCAGGG TGCAAAGTGG CATTGAGACA GCAGCAACAG CTCAAGAGAT ATCTCCTGCC 60
 TACTTGCCCC TCCTTCAGG CCGGCTCTAA GAGAAAGGCC CATCTACTCA GGAAGAGGGC 120
 CAGGNCCTTG GGTCTGGGG ATTGGCCCT GAGAGGGCTA GTCCTGTGGC TGAAAATAAA 180
 GCATGTCCCG CCCNNTAAA 199

SEQ ID NO:1181

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01327

SEQUENCE DESCRIPTION:

GATCTTTTT TGGATATTTA TACTTTTGA TATATAGTAC CTTAAGTAG CAGTATGGGA 60
 CAAGGCTTGT AATGTTTTG TCTAATGTT CATTGTCACC TTTATGCAT TTATCACTTC 120
 CAAATCTAAC TTGCACAAG TAACCATGT AAAAAAAT GTACATTTT CAAAAGTTGT 180
 AAATAAAAT AACCTTAAA 199

SEQ ID NO:1182

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01328

SEQUENCE DESCRIPTION:

GATCTGGACA GCTGTCCCTC CACTACAGAA ACCTCACAGA ACACAGCAA GNATAAGTGC 60
 ANGAAGGCTG CTTCCAGCTC CAAAGCACCT ANGAATGGAG GTAAAGCGAA GGATTCAGCA 120
 ANGACAGCAG AGGAAACTTC CANGCCAAA GNTGACTAAA GNAGTACAGG TTANGGTATC 180
 TGGTATCTGC ATGTAGANTC TTCAGCTGGT GGATGGTGAC TTTTGAAGTA CNAAGGCTT 240
 TGGCAACNGN AN 252

SEQ ID NO:1183

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01329

SEQUENCE DESCRIPTION:

GATCTAGGGA GTTACCTAGC AGACCTTCCG GACTGACGTG ATGCTACAGG GGTCCCATCT 60
 TTCCTTGTC TTAGGCTATT TTACAGTTCT GTGAATTGTA AAGAACTGAG GGTAATGCCA 120
 ATNACTCTTG TTCATAGAGG CAAATGAATT TTGTCCCATG GAGATTTAAT TGATATTACT 180
 CTGTGGATGT TGACAAA 197

SEQ ID NO:1184

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01330

SEQUENCE DESCRIPTION:

GATCATAGCT ACTACTTCAT TGCAACCTTT ATTAAGTAC CACATCAGAC ATCATGCTAA 60
 ATACCTGAAT GCATGAAAA ACTCCAAATA AGAGAATCTC TTCAGGATTA TAAAAGTTGT 120
 AAAATGCAAC TGTATTGCTG AGCAAA 146

SEQ ID NO:1185

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01331

SEQUENCE DESCRIPTION:

GATCCGGCTG CACACCAGGT GCGGAGGCTG AGCCATCCCT GCTGGACTCC CTACCGCAGA 60
 CGGAGTCANG NACGCAGCCG CAGCCNCNTT CCTTCACACC CCCTCAGAGA CTCCTTGTGT 120
 CCAACGGGAA TAGGAAGAAT TAGTTACTGA CTTACCTGA GAAAAAATA AATNCTCTAT 180
 GGTGGTTTCA CAGGAAA 197

SEQ ID NO:1186

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01332

SEQUENCE DESCRIPTION:

GATCTCTTTG TGAAGTCTGT GTTCTCTATA TTAGATTGCT GTTTATATGT AAGAATTTTA 60
 TTGCTTATGT GGCATACAAT ATTTATAACT ATAACTTTA TAGAAGTACA GTATTAAAGT 120
 CAGTGGTACA CAGACATTCT GTACATATCC TGTGAAACGT GCTGTCATAT GAAATAAATA 180
 TATCTGTCTT TACAAA 196

SEQ ID NO:1187

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01333

SEQUENCE DESCRIPTION:

5 GATCTTCCCC ATTGTCCACT CAAGTCGTGG CCTGGGGAAC ACAGACGGAG CTGTCCCCAG 60
 TGTCTCCGT CCCTCAGCCC CTGGCCTGGC TGAGTTTGGC AGGGCCTGGG CCATCCCTGG 120
 GACAAAGGTG CGTCCCTTCA GCTCTTCTCC GTGGAGCTCG GGGCTTTCTG TATTTATGTA 180
 TTTGTACGAA TGTA AAA 196

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SEQ ID NO:1188

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS01334

SEQUENCE DESCRIPTION:

20 GATCTTCGGC CTCATTCTGA ATACCTNTTC TTTGGACAGT NTTTTTCCTT TGGTGCTCTC 60
 TTGCCTTAG CTACCTTCTC TAATATGTAT GCTACCATCA CTAATAAAGT GATGGGAATG 120
 GGTTCGAGAG TCGTAATTGA TATTA AAAAG TTGTTGGACT TTTAAATACA TTTTNC AAA 180
 TAAAAAATTA AGCA AAA 196

25 SEQ ID NO:1189

SEQUENCE LENGTH:193

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01335

SEQUENCE DESCRIPTION:

30 GATCATGTGT GCACAATACT TGTGGCCAC AAAATTCAC AATGACTGCT GAGGAATCAT 60
 TCTTTTGCC TGTA AAAATAT AACAAAGGGC ATCATTAAAGT AGACCAGGTA ATTACTGCTT 120
 GTNTCTCAAG GCTGCTGTCT TTATCAGCAC TAACTAATA AATTGTGTTG TTCAGTTGTA 180
 CTTGTCCTGC AAA 193

35 SEQ ID NO:1190

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01336

40

SEQUENCE DESCRIPTION:

45 GATCCTGTGT CCTAAATTAA TATACACCAG TGGTTCCTCC TCCCTGGTAA AGACTAATGC 60
 TCAGATGCTG TTTACGGATA TTTATATTCT AGTCTCACTC TCTGTGCCA CCCTTCTTCT 120
 CTTCCCATC CCCAACTCCA GCTAAATAT GGAAGGGAG AACCCCAAT AAACTGCCA 180
 TGGNCTTTTA AA 192

50 SEQ ID NO:1191

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01337

55

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCAGTGCC TTGATGCCAA CTAAGGAAAT TTGTTTAGCA TTGAATCTCT GAAGGCTCTA 60
 TGAAAGGAAT AGCATGATGT GCTGTTAGAA TCAGATGTTA CTGCTAAAAT TTACATGTTG 120
 TGATGTAAAT TGTGTAGAAA ACCATTAAAT CATTCAAAAT AATAAACTAT TTTTATTAGA 180
 GAATGTAAA 189

SEQ ID NO:1192

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01338

SEQUENCE DESCRIPTION:

GATCAAATTT TTGTAATTT TTTTAAGAAG AGATGGCTTA TTAACAGGGA AGAAGCTTGT 60
 NATATTCCAG TTGTAAGAAT AGCCTTAGTG TTTAGATTTT TTNATGATAG GNNAGATGCG 120
 GNCATCACTG GGATATTNC AAATCCCAAG GNCATCAGAG TGAAGTGTCA GTTGTGAGAT 180
 GATTTNNAN 189

SEQ ID NO:1193

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01339

SEQUENCE DESCRIPTION:

GATCCCAGCC AGGCCCTGGA GGTCTGACAG CCCCTCCCTC CCAGAGCTGG TTCCTCCCTG 60
 GGAGGGCAAC TTCAGGGCTG GCCACCCCCC GTGTTCCCA TCCTCAGTTG AAGTTTGATG 120
 AATTNANGTC GGGCCTCTAT GCCAACTGGT TCCTTTTGT CTCAATAAAT GTTGGGTTG 180
 GTAATAAA 188

SEQ ID NO:1194

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01340

SEQUENCE DESCRIPTION:

GATCTGAATG ATACTGTCTG CTGTGTCTTT TTTCCATGAG AAATCACTGT TGCAAATTGC 60
 CTATAAATTG ACTCTACTAA AATAACAATG TTTCACTCTG AAAATTTGAA TTGAAAAAAA 120
 TGTATAATAT AAAATTGTAA TACACTCAA TGATTATAAA AGTAAAAGTT GGTAATTTAG 180
 GCAGAAA 187

SEQ ID NO:1195

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01341

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCAGGGGG GAAATGGAAT GAGTGAGGCG GGCCAGGGAG CCGCTCAGCT CCAATCTTTG 60
TCACTGTGTG AAATGTGGAC TTGGTATGAC CTGACTGTCC AATTTTCAAG ATGAACCAGA 120
AATCCAGACC NTTATATAAA ATCTCCTGGA TTTTAAATG TTGGCAATTA ATCAGAATGT 180
TTTAAA 187

SEQ ID NO:1196
SEQUENCE LENGTH:186
10 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01342
SEQUENCE DESCRIPTION:
15 GATCACTTAA TTCCTTTCTT ATCTTCCCCC TCACTTCCCT TTCTCCCACC CTCTTTTCCA 60
AGCTGTTTCG TTTGAATATA TTACTGGAAT GAGTTGCAGG NAATGCAGCA NACTTGTTTC 120
NCCTAGATTT GAGTCAAACCT CCTGNTCAAA GAATCGGTNG GGCATANAAG AAATNTTCTT 180
NTTAAA 186

20 SEQ ID NO:1197
SEQUENCE LENGTH:186
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
25 CLONE:HUMGS01343
SEQUENCE DESCRIPTION:
GATCTTTTTA ATGACAGTAC AGACTGAGAT TTGAAGGAAA CATGCACAAA TCTGTAAAAC 60
ATAGACCTTC GCTTTATTTT TGTAAGTATC ACCTGCCACC ATGTTTGTGTA ATTTGAGGGT 120
CTTGATTTC AATTGTCGG TGAAGAAAAT TTTCAATAAA TATGTATTAC CCGTCTGAAG 180
30 CTTAAA 186

SEQ ID NO:1198
SEQUENCE LENGTH:186
35 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01344
SEQUENCE DESCRIPTION:
GATCTTCAGG TATTTTAAAT TTTAGTTACA TCAATTAATG TAAATNAATC CAAATGCTAA 60
40 TTTTGTGGT GCAAGAAGTT TCTATGTAA ATNCAGGGTA TGGATAAGCT AATTAAGATA 120
TCCATCTTTG GTGGCTCTAA GTGTATTATT TGTNTTAAA TAAAGTGAC AAATATAGAT 180
AACAAA 186

45 SEQ ID NO:1199
SEQUENCE LENGTH:184
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01345
50 SEQUENCE DESCRIPTION:
GATCTAAACA CGAGGAAACA TTATTCATTG GAAAAGTGCA TGGTGTGTAT TTNAGGGATT 60

55

EP 0 679 716 A1

ATNAGCTTCT TTCAAGGGCT AAGGCTGCAG AGATATTTCC TCCAGGAATC GTGTTTCAAT 120
TGTAACCAAG AAATTTCAT TTGNTCTCA TGAAAAAAAA CTCTGGITT TTTTCATGTG 180
GAAA 184

5

SEQ ID NO:1200
SEQUENCE LENGTH:183
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS01346

SEQUENCE DESCRIPTION:

15

GATCGCCCGC CCCAGCCCGG GGCCGCTCAG GTCTGCTTGG AGGATGCCTC CCCCAGGAGG 60
GCAGTGAGGG ATGCCGCAAC CTCGACTTCT CAGCCTCCTG GGGTCCGCC GGCCAACACT 120
GTCTGTNTCA AATACTGTGC TGTGAGTTGT TTCAATAAAG GGGCCCAAG GGCTGGGCTG 180
AAA 183

20

SEQ ID NO:1201
SEQUENCE LENGTH:184
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

CLONE:HUMGS01347

SEQUENCE DESCRIPTION:

25

GATCTCTGCT CAGCTTCCCT TGCCTTTTAA GGCCTGCCCT AGCCAGGGTT CCCTCCTGCT 60
TCCAGTACCC TCTCATGGCA TAGGNTGCAA CCCAGCAGAG GGCAGCTAGA TGGACATTTC 120
CCCTGCTCGG AAGGGTTNGC CTGCCTGGCT GGGGNGGTCA GTAACTTTG AATAGTAAGC 180
CAAA 184

30

SEQ ID NO:1202
SEQUENCE LENGTH:183
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

35

CLONE:HUMGS01348

SEQUENCE DESCRIPTION:

40

GATCCCCTTT GGTTTTACTA CCCAAATCTA AATAGATACT TTTGATAATA GATAACTGCT 60
CTTTTACTAA GACATAGTCT CTACCTATAG AAATGTATTT TGAAAACACT TATTTTACAC 120
AGCAATTTTG TATCCATTTA AACTAACCTT TTATCAATAA AGCACTATTG TTTAGATATT 180
AAA 183

45

SEQ ID NO:1203
SEQUENCE LENGTH:183
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

CLONE:HUMGS01349

SEQUENCE DESCRIPTION:

50

GATCTCATTC TCCCTTTTTA TCCTGAGTTA CCATCAGTGC TAATGTTTCT CTTTTGGGTA 60
TAGTTCTCCA GGAGAACTTG TCCTATATTT NTTTGTGTGT GTTTTTTTCC TTCCAGCTTA 120

55

AACAAATTAA AACTAAATAT CTAAACCTTG TATACAGACA TAAAATTAG TGAGAGAAAC 180
AAA 183

5 SEQ ID NO:1204
SEQUENCE LENGTH:183
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01350
10 SEQUENCE DESCRIPTION:
GATCTGCTTT TNC TATTTCT CCCAACCAAA TCCTCTTAAA GACCCTTTGC TATGTAGTCT 60
CATGGTCTAG CATGCATCTT GTAGAAACAA GGCATNCTGG CAGATTGCAG GGTGAGATG 120
TGTTTATCT GTTTTATATT TAAAAGATT CTGCCAGAAA ATAAACCAG ACCTTGTCT 180
15 AAA 183

SEQ ID NO:1205
SEQUENCE LENGTH:183
SEQUENCE TYPE:nucleic acid
20 TOPOLOGY:linear
CLONE:HUMGS01351
SEQUENCE DESCRIPTION:
GATCTGAATA GAGAAATGCT TACAGATAAT CATTAGCCCA CATACCAGTA ACTTATACTT 60
25 AAAGATGGGA TGGAGTTGTA AAGTGCTTTT ATAATACAAT ATAATTGTTA AAGGCAAGGG 120
TTGACTCTTT GTTTTATTTT GACATGGCAT GTCCTGAAAT AAATATTGAT TCAATATGGC 180
AAA 183

30 SEQ ID NO:1206
SEQUENCE LENGTH:182
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01352
35 SEQUENCE DESCRIPTION:
GATCCTTGGG GGCCAGGGTG AAGGGTATTT TACGGGAACT CTATAAGCA GGAAGAAGCA 60
AGTTTATTCT TTAGACCAGT AGCTCTCAAC CATGATGTGG TCGTATATTT ATGGGTCAAC 120
ATGTGTTGTG GGGATATCCC AAGTAACTTG TTATTAATAA AAGTTAAGTT GCAAAATTTA 180
40 AA 182

45 SEQ ID NO:1207
SEQUENCE LENGTH:182
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01353
SEQUENCE DESCRIPTION:
GATCAAAATT GAAGACACAT TCAGAGGTTT GATTGGTTGA GATTAAGTGG TGTGGTGGTT 60
50 GGTGTATGTA TGTNNATTT TNATGTCTTT GTATGTAGTT CTACATAATG CAAATTGTGC 120
TTTCTGATGG ACAAGACCTC ATAAGTGTGA TTAATATCAA TAAAAGGGG ATGTTGTGGA 180

55

AA

182

SEQ ID NO:1208

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01354

SEQUENCE DESCRIPTION:

GATCCGTCAG TCTGGGTGG AATNATTGTN CGCATTGGCG AGAAATATGT TGACATGTCT 60

GTCAAGACCA AGATTCAGAA GCTGGGCAGG GCTATGCGGG AGATTGTCTA AAAGTGTGG 120

TTTTCTGCCA TCAGTGAAAA TTCTTAACT TGGAGCAACA ATAAANAGCT TCCAGAACAG 180

AAA

183

SEQ ID NO:1209

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01355

SEQUENCE DESCRIPTION:

GATCATGTGA TATTCTATAT CAGACAACT ATTTNNTTT GACCTTTCTT CCCCTCCATC 60

CAGTATTTTC GTTGATTCA TTTCTCCCC TCTCTCCCC TTCCACGAAC TGCAATACCA 120

GTAACCTTGG TATATATTT TTGATACTGT ACACATGGAT GTNTTGTTT TATGTGCAAA 180

SEQ ID NO:1210

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01356

SEQUENCE DESCRIPTION:

GATCAAAGAT TCTCCCCATC TCACAGACAA GGAAACTNAG GCCAGAGGGA GGAGAGAATT 60

GCTCATGGCT CCANAACTGG TGGCAAGTTT CTCTGGACTC TTAGGTTTAT TTTNAATATG 120

AAATATAAAA NCAGTTTCAA ATATCTNATT GAGGGAGANG TAAAACCTTA TTTAANCAAA 180

SEQ ID NO:1211

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01357

SEQUENCE DESCRIPTION:

GATCTATAAA ATGGAAGGTG ACCAATGTCA CTGCTTCTAA AATACTGTCC TAAACAACCC 60

AGAAGATTTT ATTCAGCTC ATGAATAGCT GTTCTAAATC TGTTGTATGT TAGACATACT 120

ATGAACTACC TCTTCACTTA TTATGGGGAA GTTTCCTTAA TAAAAGTGTG ACGATTAAA 179

SEQ ID NO:1212

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01358

SEQUENCE DESCRIPTION:

GATCCAAGAC CAGGGNGGTT GGGACGGCCT CCTNTCCTAC TTTGGGACGC CCACGTGGCA 60
GACCGTGACC ATCTTTTGG CGGGAGTNCT CACCGCCTCA TTCACCATCT GGAAGAAGAT 120
GGGCTGAGGC CCCAGCTGC NTTGGACTGT TTTTNCNC CATAAATNAN GGCATTTN 179

SEQ ID NO:1213

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01359

SEQUENCE DESCRIPTION:

GATCTGAGAT GTTCCTTAAC ATGTAGCCAT GTAATTAGAA CTCACAAGGG GCATTGAAAT 60
NTTTCCTTT TTCANATAGT CTGGGGCTAT TTACTTATTT NAAGTAAGCC AAGTCTACCA 120
TTTGAAAAAT GGTGCTTTAT TTCCATATCT GANGCCTGAN GTTATTTNNN AGTTTGTN 178

SEQ ID NO:1214

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01360

SEQUENCE DESCRIPTION:

GATCTGGCAT CCNCAGGCTG CAGCTTTATT AGCTTATAAC TTACTCATCT CTATCTTTAC 60
CAGCAGGCTC TGTATTGTTG ATATTTGCAA CTNGNTTTC TTTCCCATG GTGGAATTGA 120
AATAATTAGT TTTNAATNAC ATAAGANGCC TGTTTGCTAT TNGNGGAAG ATAGATGN 178

SEQ ID NO:1215

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01361

SEQUENCE DESCRIPTION:

GATCAAAGAG GTTATCTCTG CCAGTCACAA GTGTGGCTGG TGTATTCTG GGTCTGACTG 60
GAGCCCTCCT GGACTGTTT TTTAATTTC AAAGCCCTGC AGACATAGTA CCTGGTCAGA 120
ACTATGCCTC GGTTTATTTA TCATTTTGAA ATAAAATCAA AATTCAACC TGTAAA 176

SEQ ID NO:1216

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01362

SEQUENCE DESCRIPTION:

GATCAAAACA ATTACCTAAT TGCAAAAGAG AAAGTAAAT GGAACATAGT CTCANATTCT 60

NCTAATGTGT ATCTCACAAT GTCATGTAAT GTAAAGNAAA CCCTTTTGA ATTAGAATTC 120
 TTGTNCTGAA TGCTGAACTA TTTGGTAATA AAGTGCTTAT NTGCAGATAA CAGAAA 176

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SEQ ID NO:1217
 SEQUENCE LENGTH:175
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01363
 SEQUENCE DESCRIPTION:
 GATCTGTGCT GGGGAACAAA GCTTTTGCAG TACCTTATAT TGTAAGTAAA ATTTTATTTA 60
 ACATATCCTT CAGTGAGCTC ATTCACACT GTAGCCTCTT CCTTAAATTT TGTGGTGCTC 120
 CTGTAACAGT AAGANCTAAT TCTGAAATAA AAGACATCTC CTAATGCTGT GCAA 175

15

SEQ ID NO:1218
 SEQUENCE LENGTH:174
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01364
 SEQUENCE DESCRIPTION:
 GATCAGGATA ATAATCTGCT TAGTAAGAGA AACAATTGA ATTTTGAAG GAAATTGCCT 60
 TACCATTGTC AAATTAAGGT AATTAAATA CAGTGAATTT CAAAATGCCT TTTAATGAC 120
 AATGTGTGAA CTTAATTGT TTTAATAAAC CAAAATTGTT GTTATTGTGT TAAA 174

25

SEQ ID NO:1219
 SEQUENCE LENGTH:174
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01365

30

SEQUENCE DESCRIPTION:
 GATCTGAGCA GGCAAAGCTC AAAAGAGAGT TTGGAGGTTA AAAATAATTT ATTTTGCAG 60
 TAGTGTGCTT TGAAATGTGT AAATCTTATT TCTAATGTAT ACAACCACAT TTCACATAAA 120
 AATATGCAAT TTATATGCCA GATAAAAATA AAACAAGTGA ATTTGCAAGT GAAA 174

35

SEQ ID NO:1220
 SEQUENCE LENGTH:173
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01366

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SEQUENCE DESCRIPTION:
 GATCAACATG ATGGTGACTG GGAAAAAATT ACTTCAAGTA ACATGCTTAG CTTTCCTCC 60
 TTAATGTGAA AAATCAAGGG CTTACTGACA TAGGAACAAC AGAAATGCTC CTGGAACCTC 120
 AAGTTGCTGA ATTATAAGTT TATTTTNNAT CAATAAATAT NNNNATACTN AAA 173

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SEQ ID NO:1221
 SEQUENCE LENGTH:216

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01367

SEQUENCE DESCRIPTION:

GATCCATATT TAGTTTTATT AAGCTTTTCC CTGTTTTTAG TTTTGGTTTG GGTTTTTTGG 60
 CTCATGAATT TNATTTCTGT TTGTCGATAA GAAATGTAAG AGTGGAATGT TAATAAATTT 120
 CAGTTTAGTT CTGTAATGTC AAGAATTTAA GATTTAAAAA NCGGATTGGT TAAAAANTGC 180
 TTCATATTTG AAAAAGCTGG GAATTGCTGT CTAAA 216

SEQ ID NO:1222

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01368

SEQUENCE DESCRIPTION:

GATCGNCTCT GAACCATCCC NTTTCTGCTG CCCGGAGCTG GGGAAAGCTCG CTGTGGAGCG 60
 TCTCGCACGT GGCAGGCAGG CAGAGAACTT GCTGCACCTT CTAGGAAATT GCAATCGATT 120
 TGTAAATGCAC TTTGCTAAT TGGGAGTTCA AAATTAACT TTAATAAAGC AAA 173

SEQ ID NO:1223

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01369

SEQUENCE DESCRIPTION:

GATCTTAAGA GCAGACTTAA AGTAGCTTG TACGCCTTAA TGTTCAATTT GATTATTTT 60
 AAATCTTTAC ATTCAGAAAT NAGATACTGT ATTATCAGAC CAGGAGGCAT TGCTGTGAAA 120
 GATAATNTCC TATTCTAAAA TATCAAATTT AAAATAAAGA TAATGAAAGA AAACATAAA 179

SEQ ID NO:1224

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01370

SEQUENCE DESCRIPTION:

GATCCAAAAA TGGTAGCCAC TCACCCTTCA CAACTGAAG TCCATGGACC ACGGAAGTCG 60
 AGAATTAATG TACACCTGTA TCATGTGTAG GAAACCAGAA ATGTGTTCTT TATTNTTGT 120
 TCCCAAACAG GATTAATGTT GAAGACTAAT TTATAAATGT GAACCTAAGA AA 172

SEQ ID NO:1225

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01371

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCAGCATG AGGACAGAAG GCAGGAGACT TTGGTCAGTT ACCTGGGAAT TCTGGGCTGC 60
CAGGAAACGA TTTGGGCCTC TGTCAGTTTC TTTTCCATGT ATGAGGAGGG GGAAATTTGT 120
ATATTAGAAA CTTATTCATC CCACTCAGGA CAATAAAAC GAATGTACAA AAAGCCAAA 179

SEQ ID NO:1226
SEQUENCE LENGTH:175
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01372

SEQUENCE DESCRIPTION:
GATCACAGTG GCCACGNCCA GGCCACAGTC ATGGTGGCCA CGTCCACAGC CACTAATCAG 60
NAGNCCAGGC CACCCTGCCT CTACCCAACC AGGGCCCCGN GGCCTGTTAT GTCAAACNT 120
CTTGGCTGTG GGNCTAGGGA CTGGGGCCAA ATAAAGTCTC TTCCTCCAAG TNAAG 175

SEQ ID NO:1227
SEQUENCE LENGTH:318
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01373

SEQUENCE DESCRIPTION:
GATCTTTAAT CTCATGAAGT ACGACAGCTA CAGCCGCTTC TTAAAGTCTG ACTTGTTTTT 60
AAAACACAAG CGAACCGAGG AAGAGGAAGA AGATTGCTCT GATGCTCAAA CTGCAGCTAA 120
AAGAGCTTCC AGAATTATA ACACATGAGC CCCCCAAAAG CCGGGACTGG CAGCTTTAAG 180
AAGCAAAGGA ATTTCTCTC AGGACCGTGC CGGGTTTATC ATTGCTTTGT TATTGTAAAG 240
GACTGAAATG TACAAAACCC TTCAATGGGA TGTGTGTTT ATTAAGTCTC TCACCAGTAA 300
ATTTTGCATG ATGGGCTN 318

SEQ ID NO:1228
SEQUENCE LENGTH:171
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01374

SEQUENCE DESCRIPTION:
GATCTGGAAG AGGCTTGTTA CCTGAACTTC TGTGTGGTGG CAGTACTGTG GCCCACCAGT 60
GTAATCTCCC TGGATTAAGG CATTCCTNAAA ANCTTAGGCT TGGCCTCTTT CACAAATNAG 120
GCCACGGCCT AAATAGGAAT NCCCTGGATT GTGGGNANGT GGGCGNAAGT N 171

SEQ ID NO:1229
SEQUENCE LENGTH:170
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01375

SEQUENCE DESCRIPTION:
GATCTGATGG TTTTAAAAG AGGAGTTTCC CTGCTCAAGC TCTCTCTCTT TGCCTGCTGC 60
CATCCATGTA AGATGTGACT TGCTCCTCCT TGCCATCTGC CATGATGTGA GGCTTCCCCA 120

GCCACGTGGA ACTGTAAGTC CAATTAAACC TCTTTTCTTT GTAAATTAAA 170

SEQ ID NO:1230

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01377

SEQUENCE DESCRIPTION:

GATCCATGGT GTTAGAAGCC AGGGGAACAG TTAACAGGGG AGGGATACTG GGGAGGGGCA 60
TCCTGGAGTG CTGGTCTACC TCATCTGGGT GTTGATTCA TGAGTATTGT CAGTTTGTTT 120
CCAGACTCCC TGTGGAGAT GTGGAAATAA AAACCACCTA ANCANGNAAA 170

SEQ ID NO:1231

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01378

SEQUENCE DESCRIPTION:

GATCCATCAC AAAGCGAAGT CATGGGAGAG CCACACTTGA TGGTGGAATA TAACTTGGT 60
TTACTGTAAT AGTGTGCTGT TCATGGAAAC CGAGGGCTGC ATCTTGTTA TAGTCATCTT 120
TGTACTGTAA TTTGATGTAC ACAACATTAA AAGTACTGAC ACCTGAGAAA 170

SEQ ID NO:1232

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01379

SEQUENCE DESCRIPTION:

GATCTGGGAT GGAATATGGT TTTCTTGATT CCCTTTCAGC CTTCAATTTCT CTCTCTCAGG 60
ACTACTACTT TTTAATTACT TTTCACTTAA TTTCCCAATA CTGATGAAAT AAAGAAAAAT 120
GAGGGTTATT TATATACATT TCAATAAAAT CCAATTTGAT TTTTCAAA 168

SEQ ID NO:1233

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01380

SEQUENCE DESCRIPTION:

GATCTAGAGA ACATAACAAA TGAACTCTA GAAATTTGAA AGAAAAAAAA ACACTTAGCT 60
GTAAGTGCTT TGACCTATTT TTTTAAAAA AAAAAAACC TGTNTTAATT CTGTGACTGN 120
ATTGNACCCT TCACCAGCAC TANGNGAAGT NGGANTGGAN GAAATTN 167

SEQ ID NO:1234

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01381

SEQUENCE DESCRIPTION:

5 GATCAAGCCA TCGGAGCTGC TAGAGTTCTG TCTGGACTTT CCAGAGACCA GTATTCCCTT 60
 TTGCTGCCTC TAAAAGGCCT GTCCCTGCAG ACATGAGAGA CAGCAGGTCT CATGGGGGTG 120
 ACAAGCTTTT TTTTTTTT TAAANGATT TCNAAANNA ANTNCN 167

SEQ ID NO:1235

10 SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01382

15 SEQUENCE DESCRIPTION:

GATCTTTTGT CTTCAGTCT TCTTTAGTG TCCTGCTCCT AGGTTTCCT CTCTTCTGGT 60
 TCTTCTCCA GGTATTCTCT TCCAGGCCT CTCTGGCCAC TGCTTTGTAT CAGGGTTTTT 120
 CACGCTTTTG TAGAACTGAG GTTCAATAA ACAGTTTCAG TTGCAA 167

20 SEQ ID NO:1236

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS01383

SEQUENCE DESCRIPTION:

30 GATCCTCCAG CCCACCACCA CATAGTAATC ACTGACACTG TGGGGTGTCT CAGCTGGGGT 60
 TCTGCTGTGT GTGTGTGTAT TTNACAAAAT ATGTATGGTT TCTGTTTCTC TCTTTTCTAGT 120
 TAACAGATGA ACTGNNNNTA TCATTAAATA TTTTGTAAAA CATGAAA 167

SEQ ID NO:1237

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS01384

SEQUENCE DESCRIPTION:

40 GATCCATCAG TAATGTAGCT AGCTGTAGAG CTTGCAACTT AATAGCAGCA GCTGCCCAAT 60
 GCCATGTNAA GTAACAACT GGTTTTGGT TTTTTTTTC CCCTTCAGTT TAAATGTNAT 120
 GTGNAATGTA TTAACCCCT TATTTAAATA AANCTTGTTT TCAGAAATAA A 171

SEQ ID NO:1238

SEQUENCE LENGTH:166

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01385

SEQUENCE DESCRIPTION:

50 GATCTGGGGT TGGGTCATGA CACCAGCTAC CAATTNAGA ATATTATTCC TNGGTTTCTT 60
 TATGAAAAAT GGGTGCTAGT GGTAATTCCT TNGTGGCTTA GTAACTACT CTNTGGATGA 120

55

TTTCCAAACA TTCAAAGCCA ATAGCCTNGT NATNAACAAG ANATTN

166

SEQ ID NO:1239

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01386

SEQUENCE DESCRIPTION:

GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGGTCTACCT TCTGCTTCCC 60
 TGGAAAGGAT GAATTACAT CATTGACAA GCCTATTTTC AAGTTATTG TTGTTTGTTT 120
 GCTTGTTTTT GTTTTGCAG CTAATAATAA AATTCAAAT AAAAA 165

SEQ ID NO:1240

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01387

SEQUENCE DESCRIPTION:

GATCTGTCTG TGTGTTATA TATTCTTTTA TGCATACTTA AAGTTAAAGG GTTTTATCCA 60
 CTGTCAATTC AATTGGATAA CATTGTGCA AGTTTTTTT TCCTGATTAT TTGATGTAGC 120
 TGGATTCAAG AATGGATTGC CTNATCAATA AAGAATATTT AGAAA 165

SEQ ID NO:1241

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01388

SEQUENCE DESCRIPTION:

GATCCTATTT TGGGCCTGGG GTGGGTATAC CTGNGGCTGG TCTTAGGAGG GTGCTAGGCT 60
 GCAGACTGCC TTGTACTCCC TGGACACCCT CAAATGGGGT TTTCTGTGTT ATTCATAAA 120
 ATTCTTTGAA GTCCAATAAA GCATGTAGGA GATTTTAACC ACTAAA 166

SEQ ID NO:1242

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01389

SEQUENCE DESCRIPTION:

GATCAAAGGN CAAAAGACCA AAAATCAGCG GGCTGAGGAT GGAGCACAGC CATGAACCTG 60
 CTCACGACAA GACGCACCCA TGCTTCTCAG GGTCAAGGCT TTATGTTAAA GCTTCCTGTC 120
 GGGGCTGCTA GGTCAAGCATT AAAGTAAGGC AACCAACAGT NAAA 164

SEQ ID NO:1243

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01390

SEQUENCE DESCRIPTION:

5 GATCTGCTCA GTAATATAAT TTGCCATTTT TATTAGAAAT TTAATTCCTT CATGTGATGT 60
 CATGAAACTG TACATACTGC AGTGTGAATT TTTTGTGTTT GTTTTAAAT CTTTATAGTGT 120
 TTACTTCCTG CAGTGAATT GAATAAATGA GAAAAAATGC AAA 163

SEQ ID NO:1244

10 SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01391

15 SEQUENCE DESCRIPTION:

GATCTGGATT TGCTTTACCT TGTTAATATT ATCTAGGGGA AAAAGTGCAA ATTGCTCCAT 60
 GTTCTTCTCT CCCTTATGTA ACATCTCCTG AGGGTGTGTTA GTTCATGGC TGTCAGAAA 120
 GGTATTAAGG GCTTAGGCCA AATCTTACTT TGAGTATGTT AAA 163

20 SEQ ID NO:1245

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS01392

SEQUENCE DESCRIPTION:

GATCGTCAAA AAGAGAACCA AGAAATTCAT CCGGCACCAG TCAGACCGAT ATGTCAAAAT 60
 CAAGCGTAAC TGGTGGAAAC CCAGAGGCAT TGACAACAGG GTTCATAGAA GGTTCAAGGG 120
 CCAGGTCTTG ATATGATGCC CAGCATTGGT TATAGGNGCA AA 162

30

SEQ ID NO:1246

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS01393

SEQUENCE DESCRIPTION:

40 GATCTGGAAG TGAACACAGT TTATGTACAG GGAAAAGGAT TTTATTATCC TTAGGAATGT 60
 CATCCAAGAC GTAGAGCTTG AATGTGACGT TATTAAAAA CAACAACAAA GAAGGCAGAG 120
 CCAGGATATA ACTAGAAAAA GGATGTCTTT TTTTTTTTTT TNNCNCNCNC TNAANCNCT 180
 GNTGCTGCCT NANTTTN 197

SEQ ID NO:1247

45 SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01394

SEQUENCE DESCRIPTION:

50 GATCTCAATG CCAATCCTCC ATTCTTCCTC TCCAGATATT TTTGGGAGTG ACAAACATTC 60

55

TCTCATCCTA CTTAGCCTAC CTAGATTCTT CATGACGAGT TAATGCATGT CCGTGGTTGG 120
 GTGCACCTGT AGTTCTGTTT ATTGGTCAGT GGAAATGAAA 160

5

SEQ ID NO:1248
 SEQUENCE LENGTH:160
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

10

CLONE:HUMGS01395

SEQUENCE DESCRIPTION:

GATCTGAAAA TCGACCTCAA CTCAAGGGTG GTCAGCTCAA TGCTACACAG AGCACGGACT 60
 TTTGGATTCT TTGCAGTACT TTGAATTAT TTTTCTACCT ATATATGTTT TATATGCTGC 120
 TGGTGCTCCA TTAAGTTTT ACTCTGTGTT GCACTATAAA 160

15

SEQ ID NO:1249
 SEQUENCE LENGTH:159
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

20

CLONE:HUMGS01396

SEQUENCE DESCRIPTION:

GATCTGCATG ACCTATAATC TTTGAACCAC TTTGCTACCT CATGTTTTTA TCCAGCACTC 60
 TTATTGTAAT ATGTACTAGT CTGTGAACAA TGTCAAATAA AAGAGAACGA ACAGGTAGTT 120
 TGGTGGAGCT GAGCTAGTGT ACAATACACT AGTTGTAAA 159

25

SEQ ID NO:1250
 SEQUENCE LENGTH:159
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01397

30

SEQUENCE DESCRIPTION:

GATCTTGGAA TTCTTGNTG GATTTCACA GTTTTAAAA TTAATCATGT CAGCCCAATG 60
 CAGCTGTGTC ATTGCCACCT AGTGGTAAAA CTAACATTAC TGTTAAGCTG TGTGATTTTA 120
 AACTTGAATC CCCAGTAAAN GGTTCACGT TCTGTGAAA 159

35

SEQ ID NO:1251
 SEQUENCE LENGTH:159
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01398

40

SEQUENCE DESCRIPTION:

GATCCTCTG AGAGTTGATG AGGATGTGTA ACAAGTATTT NCTTCTATNG TGCCTGCCAG 60
 GGCTGAAGCT GCCTGGTATC CAGGAGGGGA ATGCTGGTAT CCCCATATGN CTGTNTTGT 120
 TTGAGATTTT TAATAATAAA TAATAAATTT TTGAAGAAA 159

45

SEQ ID NO:1252
 SEQUENCE LENGTH:158

50

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01400

SEQUENCE DESCRIPTION:

GATCCTATTC TTGTAATAAT ATTTGTATGT ATGCACAGAA ATCTGCAAAG ATGTACACTT 60
AGTGAAGTGG TTACCAACGA ATGGTGGGAC TAACTAAAT GGTCTTTTTA CTTATATGTG 120
CATTCTTTT TATAATAAAA ATGGGTTATA TGCCTAAA 158

SEQ ID NO:1253

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01401

SEQUENCE DESCRIPTION:

GATCTGCCCT GTGTATCCA GTTATGAGAT AAAAAATGAA TATAAGAGTG CTTGTCATTA 60
TAAAAGTTTC CTTTTTATT CTCTCAAGCC ACCAGCTGCC AGCCACCAGC AGCCAGCTGC 120
CAGCCTAGCT TTNCCCNNT TTTTTTTTT NNNCNNTN 158

SEQ ID NO:1254

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01402

SEQUENCE DESCRIPTION:

GATCTCAATC TTCGGGGTGT GATGAATAGC GAATCATCTC AAATCCTTGA GCACTCAGTC 60
TAGTGAAGAT GTTGTCAATTA TGTACAATAC ATAAGTAGTT TAATTAATA TGTGATGTTA 120
ACTATTATTA ATAAATTTTA ACATTTTCCA AAATAAA 157

SEQ ID NO:1255

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01403

SEQUENCE DESCRIPTION:

GATCCGGATG NGGGGAGCTC TGTACAGAGG GCTGGTGATT GTAAAAATTT CTTTGTAAA 60
GTAGAAAGTTG GGGGTGGGGT GGGTGCTGGC TGCAAAAATT TCTGGCTTCT CTTACCCCTA 120
TTGCCCCCGG CAATAAATTG TTTCTATATG CCAGAAA 157

SEQ ID NO:1256

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01404

SEQUENCE DESCRIPTION:

GATCTTATTT GGAATTGACA TTCTCTATTG TAATTTTNTT CCTGTTTATT TTTAAATTTN 60

EP 0 679 716 A1

CTTTTGTGTT CACTGGAAAG GAAAGATGAT GCTCAGTTTT AAACGTAAAA AGTGACAAG 120
TTGCTTTGTT ACAATAAAAC TAAATGTGTA CACAAAGAAA 160

5 SEQ ID NO:1257
SEQUENCE LENGTH:156
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01405

10 SEQUENCE DESCRIPTION:
GATCTTTGTN CTTGACCTCT AGACCCCAAG ATGTGAACAG TGCACGTTTT AATGTCATCT 60
TTNCTCATGT GTTATAAGCC CCAAGTTGCT GTATATTTC ACAAGTATGT CTACACACTG 120
GTCATGATTT TNATAATAAA TAACGATAAA TCGAAA 156

15 SEQ ID NO:1258
SEQUENCE LENGTH:155
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01406

20 SEQUENCE DESCRIPTION:
GATCTTGCTC TGATTATAAT GCCAGTGAAT GTTGCTGAAC TCTTTGTATA TGCAAATTGC 60
AAGATTAAAA CCATTCTGAT GCAAGGATAA ACCTTTACTT TGACTIONAG CCTGTGTTTT 120
TGTCTTTAAA TCTCTTAATT TCATTCTCT GCAAA 155

25 SEQ ID NO:1259
SEQUENCE LENGTH:155
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01407

30 SEQUENCE DESCRIPTION:
GATCTGCACT CCCACTCCCC CCACACTTCC CAAAGTGCTG GGATTACAGG CATAAGCCAC 60
AAGCCACCTC ACCCAGCCAA CATGTTACAT CTTAATTCTT GGATTTCTT CACTGCAGGG 120
CTTTGGGTGG AGAAATAAAA CTCTCAAAT GCAAA 155

35 SEQ ID NO:1260
SEQUENCE LENGTH:155
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01408

40 SEQUENCE DESCRIPTION:
GATCTGGGAG TGCTGGACGT CATCTTCAC CNCACCCAGC CGTGGGTCTT CTCCTCGGGG 60
GCAGACGGGA CTGTCCGCT CTTCACCTAG CTGTTCTGCC TGCCTGGGGC TGGGGTGGTC 120
GTGCTGAAGT CAACAGAGCC TTTACCCTGT GCAAA 155

45 SEQ ID NO:1261
SEQUENCE LENGTH:158

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01409

SEQUENCE DESCRIPTION:

GATCTTGGAG GCCAGCCAGC TGAAGGAGAC ACTGCAGGCG GTGCCCAAGC CAGGGGCCTT 60
TGACCTGGAG CAGGTGAAGC GTTCCACCTA CTTNTTCAGC TGACACCCCG TGAGCCTTGT 120
CAGTGTGTAA ATAAAGCTCT TTTGCCACCC CCAGGAAA 158

SEQ ID NO:1262

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01410

SEQUENCE DESCRIPTION:

GATCCATCAT NGATGTAAAA GTTCACAATC ATGGTTCAAA TGTAACAGTG CAGAATTGAA 60
TATGGAGGCA TGCATAACCT TCCTCTTAGA AAATGGCAGG TGTTGTAATT TCAAATTTT 120
GTGCAATTAG ATTAAATCÂT AATGCAACAA A 151

SEQ ID NO:1263

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01411

SEQUENCE DESCRIPTION:

GATCTGATGG GTTATCAGG GGTTTCCACT TTTGTTTCTT CATTTTCTCT TGCCACCAGC 60
ATGTAAGAAG TGCCTTTGGT CTCCTACCAT GATTCTGAGG CCTCCCTAGC CATGTGGAAC 120
TGTAAGGCCA ATTAAACCTC TTTTCTTCC CAAA 154

SEQ ID NO:1264

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01412

SEQUENCE DESCRIPTION:

GATCAGCACC TTGTATAGGA ATTCCCATGA ATTATGACTT CTCATTCTGT TTTATCAGAG 60
TGCAATATG TCCTACTTCA GGAAAAGTAA AACAGTCATT TACGAAAGAA AGTCAATCTG 120
TATCCTAAGC ATTTAATAA AAAGTTAAAA CAAA 154

SEQ ID NO:1265

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01413

SEQUENCE DESCRIPTION:

GATCCTGGCC TGAGAATTGA GGGGAGGTGG CCAGCCCGCA GAGGTGGGGT GCTGGGGCTG 60

CATGATTTTN GCCCTGCCGC CTTCTCTTT GGGGCTCCTT TCCCCTCTCA TACATAAAAT 120
CGCTTTCAAA TTAAATCGC TGTTCCTGG AAA 153

5 SEQ ID NO:1266
SEQUENCE LENGTH:163
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01414
10 SEQUENCE DESCRIPTION:
GATCCGAGTG AAGCCCCAGG TCTCANAGAG CAAGCTGTAG CCAGATGGTA CCAGCTTCGC 60
CTGGGGCTTC AAGAACCTCC CATCTATCCC CATTCCTGAN ACAGGGAGTT ACAGTCCCTT 120
TTTGGCCCTC ACATNCAATA AANGTGACTG ATANCACTGG AAA 163

15 SEQ ID NO:1267
SEQUENCE LENGTH:153
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
20 CLONE:HUMGS01415
SEQUENCE DESCRIPTION:
GATCTGGCAA CACGTTTTNN TTGGAATATT TGTGTTTTCT TGAGGAGGTA TAATTACTGT 60
ATCCTAGGTG TGAATTTTGG AGTGCAGATG CACATTTTAA AGAAATNATG ATTAANCTGA 120
25 TAATGTTTTT NGGCTGAAAA TATAAANNA AAN 153

SEQ ID NO:1268
SEQUENCE LENGTH:152
SEQUENCE TYPE:nucleic acid
30 TOPOLOGY:linear
CLONE:HUMGS01416
SEQUENCE DESCRIPTION:
GATCATAAAT CAAGGAATGC TGACAGCCAC TAAAGCTGGA GAAGGCCAAG GACAGATATT 60
35 CAATCCTCCC GTAGAAGTAC AGCCCTGCTA ATGCATTGAT TTTGGACTTC TGGCCTCAGA 120
ACTGTAAGAG AATAAATTC TATTGTTTTA AA 152

SEQ ID NO:1269
SEQUENCE LENGTH:152
40 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01417
SEQUENCE DESCRIPTION:
45 GATCAGACCA ACAGTGCTGT TTCCCGGGAG GAACACTTTT TNATTNTTAC CCTTTGCAGC 60
TCCCACCTTT AATCTGTTTT ATACCTTGCT TATTAAATNN GCGCTTAAAT NATTGAAATA 120
ATGCTGNCTT AGTAGCAACT AAAATGTGNC TN 152

50 SEQ ID NO:1270
SEQUENCE LENGTH:156

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01418

SEQUENCE DESCRIPTION:

GATCCCCCT ACCCACCCA GTCCCAAATC CAGTCCTCTG GCCCTTGCCT AGCCCTGAAT 60
TGCTTCTCTA AGCTGGTGT CCCATGCACA GGGCCATTCA GGAAGGGCTG GGGGAGTGTG 120
TGTGGCAATA AAGCTTGAAG GCACCGTGGG AGCAAA 156

SEQ ID NO:1271

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01419

SEQUENCE DESCRIPTION:

GATCCTCTTC TCTCCAAATG TTAGCCATCC TGAAGTAGCC GAACAGTAGA AACTTTGGTG 60
GGGATTAACC GGGAGCTTGA AAATTTGTNT TTGGTAACCT GATACTGGAC AGCTGAACTG 120
AATGGCTGCA AAATAAATAC CTCACATGAA A 151

SEQ ID NO:1272

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01420

SEQUENCE DESCRIPTION:

GATCCTGGAG GACCCTGGGC CCCAGGCCAG CTCCCATCGC TGGGGGACGG TGAACGGCCA 60
TGTGTTAATG TTACGATGTT TTTAAAGAC AAA 93

SEQ ID NO:1273

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01421

SEQUENCE DESCRIPTION:

GATCCCCTTT GTCAGTGGGG AAACCAAGGC AGAGCTGAGG GGACAGGGAG GAGCAGAAGC 60
CATCAAGATG GTCAAAGGGC CTGCAGAGGG AGATGTGGCC CTCCTCCCC CTCATTGAGG 120
ACTTAATAAA TTGGATTNAT GACACCAA 149

SEQ ID NO:1274

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01422

SEQUENCE DESCRIPTION:

GATCTCAACG TGCTGATATG GAAAGTGCTT CAGAATGTAT TAAGGACATA AATTAAGTGT 60
ACAATAATGT GTGTGTGTGT ATATATGTAT ATGCTTACGT GTGTATGGAA AGTATCTCAG 120

CAGATACAAT AAAAAGCTAA TTGTGATTAA A

151

SEQ ID NO:1275

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01423

SEQUENCE DESCRIPTION:

GATCCTCCCT CTATTTTGCA AACAGTCTGT AAGTAACTNA TAAAAGCTTA AAATATGCAA 60
 ATTTTAAAT TATATAGTTT GATTACTCA TCAAATTATC ATGTATGCTG TTATTTAAGT 120
 ATGAATAAAG GCTTTTTTAA ATNGGGAAA 149

SEQ ID NO:1276

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01424

SEQUENCE DESCRIPTION:

GATCCTACTC CTTGGAGTA AACTAGTGC TTACCAGTTT CCAATTGTAT TTAGCTTCTG 60
 GTTGAATTT GAAAAAAAAA GAAAAAAGA AAAAGAAAAC CTAAATAAAA TAGGTGAAAG 120
 TTCCCTGACT ATTCAGGTGA ATACACAAAG TTTGAAGTGT TAACTTTTTC TTTCCATTTC 180
 ACTGATGTTA CTGGTCACCT TAGAGAATTA TTCATAGTC TGTGGCTAAA TAGTAAATTC 240
 AGANGAAAAA TAAA 254

SEQ ID NO:1277

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01426

SEQUENCE DESCRIPTION:

GATCCTACTG TTGAGTTAGG AAAATATGGT TAGACAGACT CACATTACTT TTTTCAGAG 60
 GTAAACTCTA GATTACTGTG TCAACCAAT ACTATTTGGC CATAGATGTA AAAACTACCA 120
 AATAAAAGTG GATTTTGTGG TCTACAAA 148

SEQ ID NO:1278

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01427

SEQUENCE DESCRIPTION:

GATCCACAGT GGAGTCTCAG TAATTATATC TCCTTGATTT CTCATTNCT TCTTCTGCTA 60
 TAAAAGTAGA GATAATGTGT AGTCACTNCT CATTTAGTGA ACCAATTGTN ATANTTCTGG 120
 AAATCTNTTN TCTTTAAGTG TAAATANN 148

SEQ ID NO:1279

SEQUENCE LENGTH:124
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01428
 SEQUENCE DESCRIPTION:
 GATCCCAATC AGATTCCCGC TAATGGAAGA AGTTTAGAAT CTTTCAGGTG GAATAAAGTC 60
 ACATGAAAAC AAAACACAAC TATATATATT TCCAGTTTTT TTGCCTTATT GATTTTTTNC 120
 CAAA 124

SEQ ID NO:1280
 SEQUENCE LENGTH:147
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01429
 SEQUENCE DESCRIPTION:
 GATCTTTGGG GAGATACATC TTATAGAGTT AGAAATAGAA TCTGAATTTC TAAAGGGAGA 60
 TTCTGGCTTG GGAAGTACAT GTAGGAGTTA ATCCCTGTGT AGACTGTTGT AAAGAAACTG 120
 TTGAAATAA AGAGAAGCAA TGTGAAA 147

SEQ ID NO:1281
 SEQUENCE LENGTH:147
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01430
 SEQUENCE DESCRIPTION:
 GATCCTGACA CTAAGGAATG CTGAAGCTTT GGACTTCGGC AGTCTTCCAC CTTTCAGTCAT 60
 CAGCTACAGT TGGAATGAAT TTNAAAACGC TCGGGACCTG TTAATNTNTC CTGTAGNCTG 120
 TATTATNTNA AAAATCTGGG CAACAAA 147

SEQ ID NO:1282
 SEQUENCE LENGTH:147
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01431
 SEQUENCE DESCRIPTION:
 GATCTCGCTC CCCCTTCGG TTCTTTCGAC CGGTCCCCC TCCCTTTTTT GTTCTGTTTT 60
 GTTTTTTTT GCTACGAGTC CACATTCCTG TTTGTAATCC TTGGTTCGCC CGGTTTTCTG 120
 TTTTCAGTAA AGTCTCGTTA CGCCAAA 147

SEQ ID NO:1283
 SEQUENCE LENGTH:146
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01432
 SEQUENCE DESCRIPTION:

GATCTCAGTT CCTGGCTTTC CCCCCAGCCT TCTCACCCTT TGTGCTGTG TAGTGATTTG 60
 GTGAGAAATC GTTGCTGACC CTTCCCCAGA CCATTATGA GTCNAAGTTT ATTATTCAAT 120
 AAAAGTGCTN TATGCGCTTT CTCAAA 146

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SEQ ID NO:1284

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01433

SEQUENCE DESCRIPTION:

GATCCAAAGA TGAGGGGATT NTTTCAGAAA GACAATCTCG GCATGCATTA TTTCTTTNNT 60
 TTGAAGATTC ACTCATGTTG CATGCATCTN TAGCTTGTC CTTTTTAATT CCTAGTAGAT 120
 TCTGTCATAT GCCTATCTNC AATTNN 146

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SEQ ID NO:1285

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01434

SEQUENCE DESCRIPTION:

GATCCCCATG CTAAGAAAAT GCCCAAAAAA ATAGGCAAAA CACGAGAAGA GCTAGGGTAA 60
 GAGAAGGACG TAAACAGAAC CTGACACCAG CTCCTTTTCC TTCTATACAT TATTTAATAC 120
 CTATTAAATA AAATNATTTT TGAATAAAG CTTGTGGGAA CATTAAA 167

25

SEQ ID NO:1286

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS01435

SEQUENCE DESCRIPTION:

GATCAAAAAG GCTTATAAAA CAGAGTAATC TTGTTGGTTC ACNCTTGNGA CCGTGAAGAT 60
 ACTTTGTATT GTCCTATTAG TGTATATGN ACATNCAAAT GCATCTTNCA TGTGTTGTTC 120
 TTGGCAACAA ATTTTGAAAA GTAATATTTA TTAATNITT TTGTATGCAA ACATGCAAA 179

35

SEQ ID NO:1287

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS01436

SEQUENCE DESCRIPTION:

GATCCGATGG GAGTGTAAT GTGAGACACA ATGCTTGAT TATACCTGTT TGTGTTTAG 60
 CTTTGATTTT AAATAAGGAA ATAACTTGA AAATNATTG TCATCATAAA AATGAAACAA 120
 ATNAAAATAT TTATTGCCAG GCAAA 145

45

SEQ ID NO:1288

50

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EP 0 679 716 A1

SEQUENCE LENGTH:145
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 5 CLONE:HUMGS01437
 SEQUENCE DESCRIPTION:
 GATCAGGGCA TGCAACCAAA AGCAGCTTAA ATGAAATATT TAAAAATAAA ATATCAGGAA 60
 GCTATTTTGA GATTCTCTCT GGCTTATGTT TCTACTTTAG GACCCTCATT GTNCTCTTAT 120
 10 TAAAAAAAAT TATTCCTGT GCAAA 145

SEQ ID NO:1289
 SEQUENCE LENGTH:145
 SEQUENCE TYPE:nucleic acid
 15 TOPOLOGY:linear
 CLONE:HUMGS01438
 SEQUENCE DESCRIPTION:
 GATCAGATTT TTTTGTACC TACGTAAGAG TACTTGAAGT TTTATTTAAA ATAAAAATGTT 60
 GTGAAAAAGG TAGCATTCTT TTTTAGGAG TGTATTTTT CACTATGTGT GGCACGGATA 120
 20 CAATAAAGA CTTTACAAA CTAAG 145

SEQ ID NO:1290
 SEQUENCE LENGTH:145
 25 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01439
 SEQUENCE DESCRIPTION:
 GATCCCAGGG CTCCTGCCA TTTTAGTGTC TTGGTGTAGT GTAACCATT AGTGGTTGGT 60
 30 GCCATTTTT TTTTGTNCA AATGATTAA ATNATTGGAA TNCACAATT TTTAAATATN 120
 CAAATAAAN GTTAAAAACC TTAA 145

SEQ ID NO:1291
 35 SEQUENCE LENGTH:145
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01440
 SEQUENCE DESCRIPTION:
 40 GATCAGGAAT TCTAAATAAA TTTCCAGTT AAAGATTATT GTGACTTCAC TGTATATAAA 60
 CATATTTTGA TACTTTATTG AAAGGGGACA CCTGTACATT CTTCCATCAT CACTGTAAAG 120
 ACAAATAAAT GATTATATTN ACAA 145

45 SEQ ID NO:1292
 SEQUENCE LENGTH:144
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50 CLONE:HUMGS01441
 SEQUENCE DESCRIPTION:

55

GATCTGCCAG CACCCTGTGG GGCCAGACT ACAGGCTGAT GGCGGAGGCT TCGAGTGACC 60
 CGGGTGCCGA GGAGCGGGAA GAGTTGCTGG GGTAAGGGTC TCGGGCGACG CCGGCGCCCT 120
 GTGCCGTGTC CACGGGTGCA TAAA 144

SEQ ID NO:1293

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01442

SEQUENCE DESCRIPTION:

GATCTAAATA TTTNNAGCT GAGTTATTAG GGAGTCATTA TTCTGTGGTA CAATGCTGCA 60
 AAAAGCATCA TGTGGAAGAA TGGGAATAT GCTTACTTTA TGAAGTGATG TATAACACAA 120
 TGAATCTGT TTTACAACTA CAAA 144

SEQ ID NO:1294

SEQUENCE LENGTH:372

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01443

SEQUENCE DESCRIPTION:

GATCTTGGA GTATCCCTGG CTGCTAAGCC TATGGCAGGG GTGGTCCTTT CTACATTCCC 60
 ATCACTTAA CAGCTCTTTT GGGATTGGGT GTTTCATTCC ATTTCTGCCC ACTCCCTCTC 120
 CTCTCCTCTC TGGTAGGTTT AATTTTATGC TTTCCCTGAT TCCAGCTTTC TGCTTCCTGA 180
 GGAATCCCGC TCCNCCACC CCAAAGTTTG TCTGTGGGTG TTATAGTGGT AACTGCAGTT 240
 CCCTCCTCTG GGAATNGTAG GCTGTAATAG GNTTAATAAA CTCNACNTNC TCTAATCNTT 300
 GCTNAAAANG TGGGGGTAAN GGGGATGGCN TTGNCCNGG GTGGGAAANT TAAANNTGGT 360
 GTTTANGGNA AA 372

SEQ ID NO:1295

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01444

SEQUENCE DESCRIPTION:

GATCTTCTCT GTGGGGGAAA AGGAAGAGGA GGGTCTTGT CTCCANTNT GTTTATTCTT 60
 TGGGCTCTGG GAACAGGGGA CTACTTTGGG GCTTCTCCA ATNCTNTTGT ATGNTGTTAT 120
 TAAAAGCGAG CTATTGCATT TCAA 145

SEQ ID NO:1296

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01445

SEQUENCE DESCRIPTION:

GATCTTATAT CCTGTGACCT GTCTAAATTC AATCTGTTAG TTTTATCATT TTTTAAAAA 60

ATGTCCGTGT GTGTCTTCCT TGAGATTTTC TACATTATCA TGTCTCTGC ANATAAAGAC 120
 ATTTACTTCT TTCTTTCCAA A 141

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SEQ ID NO:1297
 SEQUENCE LENGTH:141
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

10

CLONE:HUMGS01446

SEQUENCE DESCRIPTION:

GATCCAGTTG TACTAAGGTG TACAGGATAT TTGCAGATAT AGGTAACTG AATGAAGCAT 60
 ATTAATAACT GCATTTCCT AACTTTGAAA AATTTTNCAT ATGTCTAGGT GATTAAAAA 120
 ATGAGATTGG GCTATTGCAA A 141

15

SEQ ID NO:1298
 SEQUENCE LENGTH:140
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

20

CLONE:HUMGS01447

SEQUENCE DESCRIPTION:

GATCTAAAT AGATATGTTG GATTGATATT CTCACGTGTT CGGTGTGGAA AACAAAACAA 60
 GTACATGCTT TAGAAGCAAC AACAATGAAA TCCTTTTGAA ATNTGTGTTA ATATCGTTTA 120
 NTAAATACC TAGTTTGAAA 140

25

SEQ ID NO:1299
 SEQUENCE LENGTH:140
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

30

CLONE:HUMGS01448

SEQUENCE DESCRIPTION:

GATCCATAGA AGGGCTTCCC AAACCTTGTT TTGCAACATC CCAAATTGTC TCCAGTTGAA 60
 GGAAGGCCTT TATCAGATTC ATAGATGAGC TTTCATTGTA AAAATAAATG TACTTTGCAC 120
 CACTTCATGA TGGAGGGAAA 140

35

SEQ ID NO:1300
 SEQUENCE LENGTH:140
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

40

CLONE:HUMGS01449

SEQUENCE DESCRIPTION:

GATCTGAGGT TTTTAGATTT TAAATATTTA TGTGGAATTA ATTAAAGGTA GTTGGCTATA 60
 TCGCTATCAT TTCATTCTTT TGACATTATT TGAATATTTT ACTGGAAAAT AAGACTAATA 120
 AATTGTAAA AGTTTTTAAA 140

45

SEQ ID NO:1301
 SEQUENCE LENGTH:139

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01450
 SEQUENCE DESCRIPTION:
 5 GATCTTCACA AAGTTGTCTT TTCACTGTGT TTTGTCAACG TGAAATTAAA TTGTAGTTAT 60
 AAGCAAAAGT TGGTTGCCTA GGGAACAATT GTATATNCAG TTAAACAGAA ATAAAAGAAT 120
 ATTTGTCTTA AGATGCAAA 139

10 SEQ ID NO:1302
 SEQUENCE LENGTH:138
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS01451
 SEQUENCE DESCRIPTION:
 GATCGNCACA TTTCCCAAAA ATAATAAAAA AATCACTAAC CTTTTTTAAG GAAAATATTT 60
 AAAGTTTTAC AAAATTCAAT ATTGCAATNA TCAATGTAAA GTACATTNA NTGCCTTATN 120
 AAAACTTTCC CAATTAAA 138

20 SEQ ID NO:1303
 SEQUENCE LENGTH:137
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS01452
 SEQUENCE DESCRIPTION:
 GATCATTTTT TCGGTCTCG AGGTGAAATG ACTTATTAAT TAAAATTTGT AAACACAT 60
 ATGCATATTG TATATGTGA GAAATGAAT CACACTTTGT CTTGGAATTA CATTAACTG 120
 30 TTTGAAATCA CTGTAAA 137

35 SEQ ID NO:1304
 SEQUENCE LENGTH:136
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01453
 SEQUENCE DESCRIPTION:
 40 GATCTTTTTG TGATTGCTTT CCCGTCTCTA AGTAGTATTC TGTGTGTCT AGAGAACTGA 60
 TTTTTCCTA CATACGCAAA TTGTACATTT GTAAGTGAAA ATNTCAATAC ATTTAAAGCA 120
 TTANCCTAAA ANCAAA 136

45 SEQ ID NO:1305
 SEQUENCE LENGTH:136
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01454
 SEQUENCE DESCRIPTION:
 50 GATCAGCTGG GTTTTGGCCA GGAAGTTGTC TTTGTGGACT CTGCCTGCAT GGCTTAGTAG 60

55

TTGAAGGAAA TTTTTTTTGT GTTTGTGTTT TTATAATTCA GTTTAATCAA TAAACATGTA 120
TTTATTGACT GTTAAA 136

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SEQ ID NO:1306
SEQUENCE LENGTH:136
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01455
SEQUENCE DESCRIPTION:
GATCCCTTTA TGAGTTTTCG TATTTTGGCA TGCTACATGT AAGTTTGTCT TAATGTTTTT 60
ATGTAAAGCA TCTTCCTCCT TTTACTTCTT TTATTGTGAT AAAACTCATA TAAATTTGAC 120
CGTTTTGAAG TGTAAG 136

15

SEQ ID NO:1307
SEQUENCE LENGTH:136
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS01456
SEQUENCE DESCRIPTION:
GATCTGGGCC CGACCTCAC TACCCCTGAG ATATTAGTTC CCAGGCCTGT TTTCCACAG 60
GATTGTGGGC TCTCTGCTTC CTTAGTCGGA AGTNTTTTCA ACTAATCAAA TAAATGAATG 120
AATGATGAAT AAGAAA 136

25

SEQ ID NO:1308
SEQUENCE LENGTH:135
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01457

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SEQUENCE DESCRIPTION:
GATCCCAAAG ATATTAAATA TATGCAAATA TTCCAAAGTC TGAAAAAATC CAACATCCAA 60
AAACACTTCT GACCCAAGCA TTTCAGATAA GGGACCAGAA TTATTAGATT AAATAAGGTA 120
TATTATTAAG TTAAG 135

35

SEQ ID NO:1309
SEQUENCE LENGTH:135
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01458

40

SEQUENCE DESCRIPTION:
GATCAGGCCA AGAGGTTGCA CAGGGCATGA TACTGCACCC TGCCTGACCC AGCTGGGCTC 60
ACAGGTCAGG GGAGAGTTGG GGCAGGTGAA TGTCAGCATC AGGCTTCTNN TTTTAAACTT 120
TTAAANAAAT ACAA 135

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SEQ ID NO:1310
SEQUENCE LENGTH:135

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01459

SEQUENCE DESCRIPTION:

GATCCTGCCT CAAAAAAAC AAAAAAATC TTTATTTCT CCATAAACTA CAGTTTATAT 60
AAGCAAAAGT TTCAGTACTA AGCAATTNA GTCTCTGCAG TCTCTNGTNT TGANTTAATA 120
CAACTTTNGT NAATN 135

SEQ ID NO:1311

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01460

SEQUENCE DESCRIPTION:

GATCTACCTG TGGCCCGGCC TCCCTAATGT NATTCACATT GAATGGGGAT GAGGTCGGAC 60
AGTGGCTCAT AGAGCGAGTA TGAGCCCTAG CTGTGGGCTA GAAATNTCT TAATAACAT 120
CCTATTTTC NTNTTAA 139

SEQ ID NO:1312

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01461

SEQUENCE DESCRIPTION:

GATCCTAGTA TGTTGATAGC TTTNATTTG TGAGTGGTTT ACTAGTCATT TATTATGATT 60
CCCATGANCT CTGATATGAT TCATTGTGGT TTTAACTCAG GTTGAATAAA AGCATCCATT 120
TCTTTTATAG GAAA 134

SEQ ID NO:1313

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01462

SEQUENCE DESCRIPTION:

GATCTCAAGG TTGATAGTGG TGTTCACTAG GAGACGTGGA ATTGAGACTA ATAAGTTGGA 60
TGTTAACTACT GTTTACTGTT TTTTCACATG TAGAAATGTT CTTTGTGTAT TTTTCTACA 120
GAGGATTTTC TCTGATTTTA TTTTCTTTGT TTCTGACTCT AATAATTAGT TGGAACTCA 180
TATAAAATGA GCTTTCCTAA ATTAAATCTA TTTTAAATAA AGTTATTAC TATTAAA 237

SEQ ID NO:1314

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01463

SEQUENCE DESCRIPTION:

GATCTATAGG TTTATTAGAA NCCTNACCAC AGNATCCAGA TTATCTTCAG TATTCTNTCA 60
GTACAGCTCT CTGCAGCTTA AACTCGGTGG TACATAAAGA AGATGATGAA CCCAAAATGN 120
TGGNCACTGT ATAN 134

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SEQ ID NO:1315
SEQUENCE LENGTH:133
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS01464

SEQUENCE DESCRIPTION:

GATCAGAAAA TCCCTCTGAC ATCTCCACTG CCCCCAAAGA CCTCCGTTGA ACATTCTGTA 60
TGGAAAAGAG CCCTGGAGCA TCAGGTTCCT CAGATAGGCC CCCAAATAAA GACCTGTCTA 120
TGGCTCTCCC AAA 133

15

SEQ ID NO:1316
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS01466

SEQUENCE DESCRIPTION:

GATCTAGCTG GCTGTAGTAT TGCNTTGATA ATTTTTTCT TTAAATTAC CTAATATATA 60
TAAGGAAGGG GTTTGGATAT ATTAAATAG GTGTTAATTT TATCTATTTA CCAATAAATT 120
CATCTCTTTA AA 132

25

SEQ ID NO:1317
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

30

CLONE:HUMGS01467

SEQUENCE DESCRIPTION:

GATCCAGCCA TTCCTGAAGC CCACCCTGCA CCTCATTCCA ACTCCTACCG CGATACAGAC 60
CCACAGAGTG CCATCCCTGA GAGACCAGAC CGTTCCCCAA TACTCTCCTA AAATAAACAT 120
GAAGCACAAA 130

35

SEQ ID NO:1318
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01468

SEQUENCE DESCRIPTION:

GATCTAAAAG CCAACTTTTT CTCAGTNTTA CTCAGTGGAA AGATAAACTA AGTTTTAATG 60
TTATNTTTTT AAATNTAAGC AAAATTTATT TCTGTNCTNT AATAAATAAG AAAATGTGGT 120
CCACTGCAAA 130

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SEQ ID NO:1319

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SEQUENCE LENGTH:129
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01469
 SEQUENCE DESCRIPTION:
 GATCCCCTGC TCCTGTTGTG TTCTGTTGTA AATCATTTGG CGAGACTGTA TTTTAGTAAC 60
 TGCTGCCTAA CTTCCCTGTG TTCTATTGA GAGGCGCCTG TCTGGATAAA GTTGTCTTGA 120
 AATTTCAAA 129

SEQ ID NO:1320
 SEQUENCE LENGTH:128
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01470
 SEQUENCE DESCRIPTION:
 GATCAGAATT TTAAAGCAG AATTTTGCA AAAGGGTCAT TTTTGTCT ACCCCTTTA 60
 CACTTTTCAG ATTCTCAAAG TGTCTCATCT CAACTTTAA AAGAATAAAG AATATCTTG 120
 TGGGCAAA 128

SEQ ID NO:1321
 SEQUENCE LENGTH:128
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01471
 SEQUENCE DESCRIPTION:
 GATCCTTGTG AGATGAAAT GGATTCACAG CTCTGGCAGT TCCCAATGTC TGGGGAGGGG 60
 TATAGGTTTG AAAGGCTGTT TGAAAGAGGA ATGTTAATA AAGGCTTTGA TTTAATCTTG 120
 AAAAGAAA 128

SEQ ID NO:1322
 SEQUENCE LENGTH:128
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01472
 SEQUENCE DESCRIPTION:
 GATCTCGAAG TNACTCCGGG CTGAGCAGTG GGGCGGCTGG GGGAGGGGTG ACGATTCTCC 60
 TCAGGCTTTG GCCCTGCAAG CAAACCCACA TATCTNCTCT GTATGTAATA AATNTNTTAA 120
 CGTCGAAA 128

SEQ ID NO:1323
 SEQUENCE LENGTH:129
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01473
 SEQUENCE DESCRIPTION:

GATCCTGAAG CNGCACTTAC CTNTGAANAG TCTTCAAAC TTTAAACCTT GCCAGTNAGG 60
 ACTTTTNTCTA TTGCAAATAG AAAACCCAAC TCAACCTGCT TAAGCAGAAA ATAAATTTAT 120
 TGATTCAAA 129

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SEQ ID NO:1324
 SEQUENCE LENGTH:127
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01474
 SEQUENCE DESCRIPTION:
 GATCTGTGAA GTTATTTTGT AAGGACATAC ATTTGGTAAG TAAGTTTGTG TCCCAGGAAA 60
 TGTATGTNTT TTTAAACCTT TTCTAAATAT GCAGGCCATT AATAATAAG ATTGTTTCTT 120
 CCTAAA 127

15

SEQ ID NO:1325
 SEQUENCE LENGTH:127
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

20

CLONE:HUMGS01475
 SEQUENCE DESCRIPTION:
 GATCAGAGAG ATTTTNTTTT TAACTACCA TGGTCCCAGG ATTCCATCCT GAAATNAATT 60
 TTCTTTTGTG TGAATATGTG TAAATAATTT AAAAATAAAA CTGTAAAANA TTTGTNCGAA 120
 GAATAAA 127

25

SEQ ID NO:1326
 SEQUENCE LENGTH:137
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

30

CLONE:HUMGS01476
 SEQUENCE DESCRIPTION:
 GATCCCCCTT CATTTGATGT TTGGAAAAATN CCAGTAATTA TCATTTTTCG AACGAATATG 60
 GATACCACAT AGTACTTTGG TGTTACCTGC TTTTGAAAAA TAAAGTCTTT GGTTCACCCG 120
 GTGAACTATT TATGAAA 137

35

SEQ ID NO:1327
 SEQUENCE LENGTH:126
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

40

CLONE:HUMGS01477
 SEQUENCE DESCRIPTION:
 GATCCTCAGC CTCCCAGTGG TCTTTGTAGA CTGCCTGATG GAGTCTCATG GCACAAGAAG 60
 ATTAAAACAG TGTCTCCAAT TTAAATAAAT TTTTGCCCAT TTCTATTATA AAAAATTGT 120
 TGTAATA 126

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SEQ ID NO:1328

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SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01478

SEQUENCE DESCRIPTION:

GATCCATCTG TGTAGTTTCT GAACAGTCAG CGATTCCAGG TTTTAAATAG TTTGTAAATT 60
TTCAGTTTCT ACACACTTTA TCATCCNCTC GTGATTTTTT AATTAAAGCG TTTTAATTCC 120
TTTCTCAA 129

SEQ ID NO:1329

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01479

SEQUENCE DESCRIPTION:

GATCCATGCT TTAGTGTGTT TAATGGGGGT AACAGGGGTC CCTACAGCCC TCCCAGCTAA 60
ACATTGGGAA CAAAACACCA GCCCTTTTGT AGTGGATGCA GAATAAAATT GTTAATCCAA 120
TCAA 125

SEQ ID NO:1330

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01481

SEQUENCE DESCRIPTION:

GATCTGTGTT GAAAGTNGTA TATTTTATC TGTNCGGTGC TGAGTGCAGG CCACCAGCTC 60
CTAAATAGAG GTTCCCTATA TCGCGGTATG ACATGGTGAA TAAACACAAC TCTCTCCACT 120
CAAA 124

SEQ ID NO:1331

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01482

SEQUENCE DESCRIPTION:

GATCGTTGTA ATTNNTTGAC ATTCCTTTNA GAAGTTGTGA AATGTTACAA CTTGTNCTTA 60
TGTAACACA ATCTCCTGTC TCAGTACAGA GGCAGTACT TCAATAAAGT CTATTTATAC 120
TAAA 124

SEQ ID NO:1332

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01483

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCAAAAAA TGGAAATGTA TAATTAAATC ATACTTAGCA AATCTAACAC ATGAAATGTA 60
ACATCTGCAT ATGGAGAATC GTGTTACTTT ATTGAAAAAC ATTAAANGTT TGAGANCTTA 120
AGTTGGAAA 129

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SEQ ID NO:1333
SEQUENCE LENGTH:122
SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear
CLONE:HUMGS01484
SEQUENCE DESCRIPTION:
GATCTGCCAA GATTCTTTGA ATACAGATAA TTAATGTAAA CAATTATCAT AAGTATACTA 60
ACATGTTATN CTTTTTAAAT AAGAAGGTAT AATAAAATAT CCCATTGGTT TNATGTATTA 120
AA 122

15

SEQ ID NO:1334
SEQUENCE LENGTH:122
SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear
CLONE:HUMGS01485
SEQUENCE DESCRIPTION:
GATCGGGCCN TTGGCTGTAA GACCCGACCC TTCGAGAACC CGANACGAAA CGCTCCATTA 60
CCACTGCNCA GTGAGATGAG GGACTCACAG TTCCAAGAGG NTTCTTTCCC GTGGNCCCCT 120
NN 122

25

SEQ ID NO:1335
SEQUENCE LENGTH:121
SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear
CLONE:HUMGS01486
SEQUENCE DESCRIPTION:
GATCCAACCC TGTAAGTATA GTACTTCCCA GTATGATATT GTGATGTTT ATACAATGCA 60
GTGAACATAA CCAACTTGTT ACCTAAATAA AGANTTGATA AAAACAGTGT GACATATTAA 120
A 121

35

SEQ ID NO:1336
SEQUENCE LENGTH:120
SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear
CLONE:HUMGS01487
SEQUENCE DESCRIPTION:
GATCAAGGTC TGCAAGGGAA TTCTTGTTGTG CTGCTTTCCA TTTGACACCG CAGTTCTGTT 60
CAGCCATCAG AAGAGAGACA AGGNATTAAA AATTCTTTT TAATCNNGTT ACCAAATAAA 120

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SEQ ID NO:1337
SEQUENCE LENGTH:119

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01488
 SEQUENCE DESCRIPTION:
 GATCTAGTAG GCACGTCTGT CAACAGGACA CATGCCTCCT CTGACTATAA CCTCTTAATA 60
 GTTGTGTATA ATGAAAACTG TAAACTTTTT TAAATAAACN GTGTATATAC CTTGGCAAA 119

SEQ ID NO:1338
 SEQUENCE LENGTH:120
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01489
 SEQUENCE DESCRIPTION:
 GATCCTGAAG CCATGGTTTC TTCCCTGCCA GAAATGAAAG GTTCAGTTAT GAGGCAACCC 60
 TCTAGTAAGG CATTGTAAAA GTTACTGGAT TTGGTTTAAT AAAAGTTGAA ATAAAGTAAA 120

SEQ ID NO:1339
 SEQUENCE LENGTH:322
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01490
 SEQUENCE DESCRIPTION:
 GATCTTCCGA GTGCTTGGGG CCCACAGAGA CATCATCCTG GAGAGCATTC CCACTGACAA 60
 CCCAGAGGCG CACAGCAACC TCTACATCCT CACGGGCCAC CAGAGCACCT ACTAAGAGCA 120
 GCGGGCCTGT CCAGGGGCTC CCCGNCCCAC CCCACGCCCT AGCTGCAGGC CCTTTTGGGC 180
 AAAGGGGCCC ATCCTGGGCC ATCCATTCCA TTTTGTCCA CATTCCTTT CTACTCTTC 240
 TGCCAAGAGN CTGCCCTGC ATTTGTCCTG GGAAACACGG TATTTAAGAG AGAACTATAT 300
 TGGTATTTAA GNTGGTTTGT TN 322

SEQ ID NO:1340
 SEQUENCE LENGTH:118
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01491
 SEQUENCE DESCRIPTION:
 GATCTTTGGA GCAAAAGCCA ACGGCAGGAA AAAATAGTTT GTACCAGTTT CATGAAGTAT 60
 GTCTTTGGGT TTTGTAAAT AATTTAACT CAAATAAAAT TGCTACTTTC AATACAAA 118

SEQ ID NO:1341
 SEQUENCE LENGTH:118
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01492
 SEQUENCE DESCRIPTION:
 GATCAGAATN AAATNTGTAT AGAGCAGAGT TTTAAATGA ATGTAAATAG CACTAAACGT 60

NTNCTTTCTG CAACCTGTAC TTACAGATTC TCCCTGTAAA CTAAATAAAA AAAAANTN 118

5 SEQ ID NO:1342
SEQUENCE LENGTH:118
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01493
10 SEQUENCE DESCRIPTION:
GATCACAAAA TGTGCATGAG NGTTATTNAC TTTATTCTNG TACAGTACTA GGATTCCTGT 60
AACCACCTCTT TTTTCTTC GNNGTATTGA AAAGTGGTTC AGTGTTAACC AGGCAAGN 118

15 SEQ ID NO:1343
SEQUENCE LENGTH:118
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01494
20 SEQUENCE DESCRIPTION:
GATCAATTCA CTTAAAAGNA TGGCCCANAT AGCACNNATA GGACCAAGGG ACACATGTAG 60
TCANTTTTAA AAAACATGTA CTTGGTCTTT TGTGTGTGTC TGTATATTC CATTAGAN 118

25 SEQ ID NO:1344
SEQUENCE LENGTH:117
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01495
30 SEQUENCE DESCRIPTION:
GATCCCAGGA GAGCTGGGCT ATGACTGCAA TAAGGAGTTG TTCCTTCACC TGAGATGTGC 60
TTCTTTTGGT TCATTTCTGG CTTGACAACA AGAAATAAAC GTGGTATGTT CCTGAAA 117

35 SEQ ID NO:1345
SEQUENCE LENGTH:119
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01496
40 SEQUENCE DESCRIPTION:
GATCTTGAGG GACCCAACAT TTGTAGGGGC ACTAATCCAG CCCTTAAATC CCCCAGCTTC 60
CAAACTTGAG GCCCACCATC TCCACCATCT GGTAAATAAC TCATGTTTTC TCTGCTAAA 119

45 SEQ ID NO:1346
SEQUENCE LENGTH:116
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01497
50 SEQUENCE DESCRIPTION:
GATCAGATTG GGGTGGGAGA AAGAAGTGGG TATCAAGGGT GATTGTAATT TTCTGCAGCA 60

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TTAAAGTGGC GTTAATAAGA TAAGTAATAA TAAAGAATTC TAACATCCAT GTCAAA 116

SEQ ID NO:1347

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01498

SEQUENCE DESCRIPTION:

GATCCGGTGG AAATCCAAGC TCTGGGCTGG TAATTTTAT GAGCATTTC AGCTTTTGCA 60
AATACAAAAT ATAATNCTTT ACAAAAATAA ATTTTATNC TAATCTAAAT CTGAAA 116

SEQ ID NO:1348

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01499

SEQUENCE DESCRIPTION:

GATCTTCTCT ATGATTGATA CATGGCACAG TGAGAGATTA ATGGGCATTG TGTACAAATT 60
GCTTCTCACC ATCCCCATTA GACCTACGAA TAAAGCATCC GGTCTAAAA TTAAA 115

SEQ ID NO:1349

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01500

SEQUENCE DESCRIPTION:

GATCTTTTGG TAAAAGGACC AAATGTTCTT TTATAAATGT AATAAGGAAT ATCTTGCTCT 60
TTAAAATTTA TTAGGNNTTT AATGAGTAAT TTNATTAAA AGATTCTTT TTTTGAAA 118

SEQ ID NO:1350

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01501

SEQUENCE DESCRIPTION:

GATCCTATTT GTTTCATTTT ATTGTAAATN CCCATTTGCA TCAAAACCTA ATNATAGTGA 60
TNGGTAAGTA AAAACAAATG GTGTATTGCT TTTCATACAA GTGTTTTCAC AAAAGCCATT 120
TGCCTAGGCA GCAAAAAATA TTAATTTGTT AAAAAAATT TTCCTTCGTG TCCATCCNCA 180
NAAANTNGNG NN 192

SEQ ID NO:1351

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01502

SEQUENCE DESCRIPTION:

GATCTGTGGA CTTTCATCAN ATTATGAGAC TNNCTCAATT TCATGACTGT ACTACCTGAA 60
 ACAAAGTGAG AAAGGACAGG TGTATTTTNN TAAGTCATCA AGATAAATCC TTAAN 115

SEQ ID NO:1352

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01503

SEQUENCE DESCRIPTION:

GATCTTAGTT TGTAGCTTAT GACTTATTTA ATGAATGGAT GCCCAGCCAA GCTCAGAGTA 60
 GGCGCCCAAA GCATTGTGGA TTATTTTCCT GTTTGTCTT TTTTTTTTTT TTTTNAAG 120
 CCATGNCANC CCNGANGGGG CCAGNGANTN 150

SEQ ID NO:1353

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01505

SEQUENCE DESCRIPTION:

GATCGNNAAG AGGTTACCCA GACCACACAC AGTTTGAGAA AACATNCCCA TTATNACCCA 60
 TCTAGCAAAG AGGCACCCTA AGTGGTCCAT GAAGAGTTTA ATTTATNTT AAN 113

SEQ ID NO:1354

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01506

SEQUENCE DESCRIPTION:

GATCGGGTTT AGACGNWAGN TCATTGAGT AAGCAAGCCA AAAGCNCACA TTTGTATGCC 60
 TTAGGTCTTC TAAAAATGGT ATCTGTAAAC ATGTGTCCAA TATAAANCT ATN 113

SEQ ID NO:1355

SEQUENCE LENGTH:411

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01507

SEQUENCE DESCRIPTION:

GATCCTCCCT GCCCGCGAAG TGNACAGTTT ACAAATTAT TTTCTGCAA AAAGAAAAA 60
 AAGTTAGGTT AAAAACCAA AACTACATA TTTATTATA GAAAAAGTAT TTTTCTCCA 120
 CCAGACAAAT GAAAAAAG AGGAAAGATT AACTATTTGC ACCGAAATGT CTTGTTTTGT 180
 TGCGACATAG GAAAATAACC AAGCACAAAG TTATATTCCA TCCTTTTAC TGATTTTTT 240
 TTCTTCTATC TGTTCCATCT GCTGTATTCA TTTNTCCAAT CTCATGTCCA TTTGGGTGT 300
 GGAGTCGGGG TAGGGGTAC TCTTGTCAAA AGGCACATTG GTGCATGTGT GTTTGCTAGC 360
 TCACTTGTC ATGANAATAT TTTATGATAT TAAGGNAAT CTTTGAAAA A 411

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SEQ ID NO:1356
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01508
SEQUENCE DESCRIPTION:
GATCATGGTG TAATAAGACA TAACGTTTT CCTTTAAAAA AATTTAAGTG CGTGTGTAGA 60
GTAAAGAAGC TGTTGTACAT TTATGATTTA ATAAAATAAT TCTAAAGGNA AA 112

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SEQ ID NO:1357
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01509
SEQUENCE DESCRIPTION:
GATCAAGTGC ATTTGACAGA AAAGTTCAGT TTCTTGGGAA GAAACACCTT TTAAGCTGAA 60
TGGAGAAAAT NCCAAAATAA ATTATATCAC CACAATGGTG TATACTCAGA AA 112

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SEQ ID NO:1358
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01510
SEQUENCE DESCRIPTION:
GATCTGGGAA AAAACAAGA GACTCAATGG AGACAGAAGA AAATCCCAAG GTTCTAATAA 60
CTNCNTTCTN AAAAANTATC TACCCCATTT GGTGAAGTGA AAANCAGAAA AN 112

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SEQ ID NO:1359
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01511
SEQUENCE DESCRIPTION:
GATCCTGGTT GGAGTAAACA TTCCATGGGA ACTCGGGCTG TNAGAATNTC CTAACCACCT 60
GANTGCAGAA ACATCCTTAT CACATCCTNC TGGGAAAGNC CAACAGCCTG AN 112

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SEQ ID NO:1360
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01512
SEQUENCE DESCRIPTION:
GATCCATCAC CTGNGCAGCA TAACTGGCTT CNNCTCAGTC ATCCACACAA CACCAGGACT 60
TAAGACAAAT GGGACTCCCT GTCATCTNGA GCTATNCATT TATTTAACT GN 112

SEQ ID NO:1361
 SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01513
 SEQUENCE DESCRIPTION:
 GATCCCTTCA TTGATGTTTG GAAATTCCAT ATTACATTTT GCACGATATG GTACACATAG 60
 TACTTTGGTG TACCTGCTTT TGAAAAATAA AGCTTTGGTC ACCCGGTGAA A 111

SEQ ID NO:1362
 SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01514
 SEQUENCE DESCRIPTION:
 GATCAGAGAA TGCAGCAGCA GTTTTTTCC TNGTTTNCCT ACCACTTTAT TCTTTCANAG 60
 TTAAAGAAA ATGGACTCAT GCACAGAACA CTATGCATTT NAAACTNGT N 111

SEQ ID NO:1363
 SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01515
 SEQUENCE DESCRIPTION:
 GATCGGGGGC GTANATNCAT AGTAGTTTTT ACAGCTGTGT TATCCTTGC GTGTAGCTAT 60
 GGAAGTTGCA TAATTATTAT TATNATTATN ATAACANGTG TGTCTTACGT N 111

SEQ ID NO:1364
 SEQUENCE LENGTH:110
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01516
 SEQUENCE DESCRIPTION:
 GATCTCAAAA CAGTGCTAAA ATCAAAGNTG TNGACTGTAA AGAAAAACAT GTATATATAT 60
 TGCACCTNAA AGTTGTCAGA AGNTAGAAAC TNAATAAAC TAACTTTAAA 110

SEQ ID NO:1365
 SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01517
 SEQUENCE DESCRIPTION:
 GATCCCACGC CACAGCCTTT TGNTNTGCAA CTGCCTTCTT CGGAAAGAAG AAGTGGGAGG 60
 ATGTGAATTT TAGTTCTGAG TTTACCAAAT AAAGAGATAT AAGACGAAA 109

SEQ ID NO:1366

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01518

SEQUENCE DESCRIPTION:

GATCATGTAC TGAAGTAGTT TAAGCAGGCT GGCTAACTTA GACTNATTGA TTCTGCNTTT 60
GTACTNNAAT AGGGGTTATA ATTGTAAGAT AAAAATGTGT GTGTNCAAN 109

SEQ ID NO:1367

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01519

SEQUENCE DESCRIPTION:

GATCTGGGGG TTCTTCATA TTCCTGCTGT TGGAAGCAGT TGACCAGAAA TGCTTGNCAG 60
NACTGCCAAA GCACTGCTGT GAAATGTGAA GTACTTTGTT TTTTATTTT TAATNATTTT 120
CTTTTTGTTA TTAATATTTT TCTCTGTTCC TTGTTATTA CTTGCATGGT TTGGCGTCAG 180
AAGTCCTTAC CTCTTTATAT TGTTCGAGG TTTAAATAAA ACAGTGTGGT GCCAAA 236

SEQ ID NO:1368

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01520

SEQUENCE DESCRIPTION:

GATCTTGAAG TTATTTTAA GACATACATT TGGTAAGTAA GTTGGTCCCA GGAATGTATG 60
TNNTTNAAC CCTTTCTAAA TATGCAGNCA TTAATAAATA ANATTGTN 108

SEQ ID NO:1369

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01521

SEQUENCE DESCRIPTION:

GATCCAACCC AAATCAAATT GTTAAATGCC CTCTTGAATT TTTTGTCTG TTATTTAATT 60
ATATGGTGGA ATTAATAATA AAATAAATT CATGTCTCTG ATTCAAA 107

SEQ ID NO:1370

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01522

SEQUENCE DESCRIPTION:

GATCTNGAGC TCTGTCTTCA GCAGATTCA GGTGTAACAT TTGTTAACTC GTACTNGAAG 60
GTGTGTCCTC AAGAAGAAAG TNTCAAATT AAAAAAGCTG CTGCAAA 107

5 SEQ ID NO:1371
SEQUENCE LENGTH:107
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01523

10 SEQUENCE DESCRIPTION:
GATCATGTAC ATTGTAACGT GTGTCGTCAG TACTGCAGTT CCTCAACTTT NTTTGTCTNT 60
NATTACCATG ACATTTTAA AGATACAGCT ATTTTNTCGA TGTNAAA 107

15 SEQ ID NO:1372
SEQUENCE LENGTH:286
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01524

20 SEQUENCE DESCRIPTION:
GATCACATCT AAAGCTTTAT CTTTGTGTAA TCTAAGTATA TGTGAGAAAT CAGAATTGGC 60
ATAATTTGTC TTAGTTGATA TTCAAGGCTT TAAAAGTCAT TATTCCTGGG CTGGGTAAGT 120
GAATTTATGA GATTACTGC TCTAGAAAGT ATAGATGGCG AAAGGACCGT TTTGTATTGC 180
25 TTCCTGATTA CCAGTCTGAT TATACCATGT GTGCTAATAT ACTTTTTTGG TTATAGATTG 240
TCTTAATGGT AGGTCAAGTA ATAAAAAGA GATGAAATAA TTAAAA 286

30 SEQ ID NO:1373
SEQUENCE LENGTH:107
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01525

35 SEQUENCE DESCRIPTION:
GATCCGCGCA CCTAAGCCTC CCAAAGTNCT GGAATTACAG GCATGANCTA CCATNCCTGG 60
CCTTCTAATG TTTTCNTAA TTAAGGCTCT NAACTTCCAA GACTGTN 107

40 SEQ ID NO:1374
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01526

45 SEQUENCE DESCRIPTION:
GATCTAGAGG NGAGAAAAAG ATGANTTGCT CCTTACATTC GATAATCAGT GACCACGAAA 60
CACTCAGACC AGAGCCTGGC TTATCAAAAA CCTTNAGTGA GNNCTN 106

50 SEQ ID NO:1375
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01527

SEQUENCE DESCRIPTION:

5 GATCCACGTG CCATTGTGGA GGCAGAGAAA AGAGAAAGGN TTTATATACG GTACTTATTT 60
AATATCCCTT TTAAATTAGA AATTAACA GTTAATNCNC TTCAA 106

SEQ ID NO:1376

SEQUENCE LENGTH:117

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01528

SEQUENCE DESCRIPTION:

15 GATCCTGAGC TCCCTTTGCA GTCTGAAAAA GGTATTGCAG TCAGAACTGT GTACTGATGA 60
TAAANGCCTC TGGTAGCAAT AAAAAGTTGT CCCTAACAAA AGAGGCAAAA AAATAAA 117

SEQ ID NO:1377

SEQUENCE LENGTH:105

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01529

SEQUENCE DESCRIPTION:

25 GATCCAGCAA ACAGGTTCTN TTAAAGAAAA ATAATTTATA CTAAATTNAG TAAAATGGAC 60
TTCTTATTCA AAGCATCAAT AATTAAGA NTTATTTNAA TGAAA 105

SEQ ID NO:1378

SEQUENCE LENGTH:105

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01530

SEQUENCE DESCRIPTION:

35 GATCAGCAAA ATGAGATAAA TGTTTCTNTT TTCCTTTCTG ACTGCATTAA ATCAGATACA 60
ACTCAGCATT AAAAAGCTAT CTNTGTAAAT NTNGTNACTA ATAAN 105

SEQ ID NO:1379

SEQUENCE LENGTH:105

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01531

SEQUENCE DESCRIPTION:

45 GATCTAACAC GAGGAACATA TCATGGAAAG TGCATNGTAT NTATTTTAGG GTTATGAGTT 60
CTTTCAAGGG CTAAGNTGCA GAGNATTCC TCCANGAATC GTGTN 105

SEQ ID NO:1380

SEQUENCE LENGTH:105

50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01532

SEQUENCE DESCRIPTION:

5 GATCAGGTTA CATGAGGGNT CACTCTTCTT GTTGACANN CTGTGAGTTC GGGCAAATNT 60
GTAATGGCAT ATCTCCACTA TTACAGTNTC ACACAGAATT ATTTN 105

SEQ ID NO:1381

SEQUENCE LENGTH:332

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01533

SEQUENCE DESCRIPTION:

15 GATCGGTGCG TTCTCCTGAT GTTTTNCNT GGCTTGGGGA TTGTACACGG GACCAGCTCA 60
CGTAATGCAT TGCCTGTAAAC AATGTAATAA AAAGCCTCTT TCTTTTGGG GTGGNNNTTG 120
TCCTTCTGTC AGCTAAAATG GGAGCTCATG AGAGAAGGAC GTCAGGGAAA CGGGGTTGAG 180
GGTGGTCTCG GTGCAGAGAG AAGGGTGTCA GGGAAACGGG GGGTGAGGGT GGTCTTGGTG 240
20 CCAGACGTAG GGAATGGTGT TGGGAGTGGC CCGAGTGCCT GGCACAGTTG TCTNGTTCAT 300
TCATGTAACA TGATAATTTT TAAATCATTAA AA 332

SEQ ID NO:1382

SEQUENCE LENGTH:157

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01534

SEQUENCE DESCRIPTION:

30 GATCCTGCTG CTGTAATGGG AACCCCTCCC CCATTACTT CTCCACCTCC CGTCCTCCCC 60
ATCATTGGTT TTTTTTGTG TGTCAACTGT GCCGTTTTTA TTTTATTCCT TTTATTTTCC 120
CCCTTTTCAC AGAGAAATAA AGGTCTAGAA GTAGAAA 157

SEQ ID NO:1383

35 SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01535

SEQUENCE DESCRIPTION:

40 GATCTACTGT TTGTTGAAGT GTGGGAAAAT AGCCTCTCTA AGGCAGCCCA GATGGGACCA 60
AAATCAGTAC AAACATATTT AAGTAAATTT TAAAATGCGT AAA 103

SEQ ID NO:1384

45 SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01537

SEQUENCE DESCRIPTION:

50 GATCCCCTTG TCCCTGGAGT AGGGACTAAC TATAGCACAA AGTAATATGT GCCAATGCTA 60

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5 TTTGTGAAAT GTTTGGGCTT TCTAAACGAC TAAAGGATTT GTNGGGTTTT TNCTTAAGTT 120
 TTGAACCAAA TCCTAGAGCC AGCTGATAAT ATTTAATAAT CTAGAGGAGA GAATAATGAT 180
 GTACCANTAA GTGGAGATTC CTCCTTATGA TGTATGCTAG GTTATGGAAG ATGTAAAATA 240
 TTCAACTTTT TCCTNCGTTT TTTGGACTTT GTATTTTACT GNAN 284

10 SEQ ID NO:1385
 SEQUENCE LENGTH:103
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01538
 SEQUENCE DESCRIPTION:
 15 GATCTGGAAC TCCTAAGCCA TCTACTCCTA CACCAACCNN TTCATCGAAC NCACACCCTN 60
 CTNATGCTCA GAGCTCAACT CCTAGTACCC CTTCAGCCAC CCN 103

20 SEQ ID NO:1386
 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01539
 SEQUENCE DESCRIPTION:
 25 GATCGCCGTT CTGTTTNGCA TNNTCCCACC GGGAGTTGCC NGGCAGGAGC ATGGGGTGCT 60
 TGGTTGTTTC CTTCTAATA AAATAAACGC GGGTCGCCAT GAAA 104

30 SEQ ID NO:1387
 SEQUENCE LENGTH:102
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01540
 SEQUENCE DESCRIPTION:
 35 GATCTTAGCC TTAGGGTAAG TAAATGGGT CTTTTAATAT AANAGTGTGA AAACATTTTC 60
 NATCTAATAG TACTCTTTN AATAAAAGTC AGTAGTNGGA AA 102

40 SEQ ID NO:1388
 SEQUENCE LENGTH:378
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01541
 SEQUENCE DESCRIPTION:
 45 GATCCTNGGT TTTTGTGGTT TGACTTCTAT GNGTTTTTAA AAAACACAG ATTTTATAGT 60
 TTAATATTGT GTAAATGTAC TCACCTTAGG GATTCATTG AATGATGGTN TTATACCATG 120
 ATTGTNTACA GTTTGTGAAA TTGTTGCAAG GGCAAAGATA ACTCTTAAAA AACCGTCGAG 180
 ATTACAATGC TCTAGAATCA GCATATAAGA AAATAAATGA TATCTNCATG TNGANTNNGG 240
 GTGGATGGGG GGAGCACGCA TAATTTTAA GTGTGAAGCT TTGCATCANA GAAATTATTA 300
 50 AAANGCTTTT TTNCTCCNGT ATNTTCCTGT ATTAATCCTT AATGTTTATG GCAAATAAAA 360
 TGTAAGGGGN ACATGAAA 378

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5 SEQ ID NO:1389
 SEQUENCE LENGTH:102
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01542
 SEQUENCE DESCRIPTION:
 GATCGTAACC GTAACCGTAA CCGNNAAGCA CAAACGGGGG GAGCGGGGCA GTGAGCGGGG 60
 10 CAGGNATGAG NCCCGAGGTG GGGTCGGTGG CCAGNACAAC GN 102

15 SEQ ID NO:1390
 SEQUENCE LENGTH:102
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01543
 SEQUENCE DESCRIPTION:
 GATCCAGAGG TCCNNGTCAC TTGGAGAAAG NCCAGTCCCT GNGACGGGGC AGCCCTCTNT 60
 20 GTCCCTCGGG CAGCTCGTGT GAATCCTGGG ACCTCTCCG GN 102

25 SEQ ID NO:1391
 SEQUENCE LENGTH:101
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01544
 SEQUENCE DESCRIPTION:
 GATCTCAGCA ATTTGAACAC TAACCTCTCC CCTCCTGGCT CAAGAATTAC TCCGAAGTCA 60
 30 GTCTGCAGAA AATAAATATT TAGTATGACA TGACACTTAA A 101

35 SEQ ID NO:1392
 SEQUENCE LENGTH:101
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01545
 SEQUENCE DESCRIPTION:
 GATCTACTCA GGCAACNACC AATCTTCTAN TCTGTCACTA TAGATTAATT TGCATTNTTA 60
 40 AAGAAATNNA CATACATGGA ACCATACATC ATCTATGCTT N 101

45 SEQ ID NO:1393
 SEQUENCE LENGTH:101
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01546
 SEQUENCE DESCRIPTION:
 GATCCTAGGA AGTNTGTCCC TGTCTCCCT GTGCAGGGTA TCCTGTAGGG TGACCTGGAA 60
 50 TTCGAATTCT NTTTCCTTG TAAAATATTN NTNTGTCTCT N 101

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SEQ ID NO:1394

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01547

SEQUENCE DESCRIPTION:

GATCCACGTG CCATTGTGGA GGAGAGAAAG AGAAGTGTTT ATATACGGTA CTTATTTATA 60
TCCCTTTTAA TTAGAATTAA AACAGTTAAT TTAATTCAAA 100

SEQ ID NO:1395

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01548

SEQUENCE DESCRIPTION:

GATCTTAGGT TACATAAAGT TTCTAAAGTT TCAAAGAGTC TTGATACAAA ATCAGTTTAT 60
ATTCTGAAAA TATTTATAAT AAAGTATTCT AATTCTAAA 100

SEQ ID NO:1396

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01549

SEQUENCE DESCRIPTION:

GATCAATTCT TCAATTTGAT TGAAGTGTTC AGCCTTTTCA AGATTTCCTT ATTTACAAAT 60
GATTACATTT AAATGAATGT ACATTCTTCT CACTGAAA 98

SEQ ID NO:1397

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01550

SEQUENCE DESCRIPTION:

GATCTGTAAC ATTTGTTTCA AAATGCTGTT TCATTTTAT AAAGTACCAG TGTTTAGCTG 60
CTTTTATAC ATTAAATTAG CAATTTGAAA AACTCAAA 98

SEQ ID NO:1398

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01551

SEQUENCE DESCRIPTION:

GATCCTCAGT GTCCTTACCC CCTCCTACCT CTTTCTGTG CCACCTGCTG TGGGTCCAGC 60
AGGCNTTAC TTGAGTACAA TAAAAAGTCT GAGTCAAA 98

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SEQ ID NO:1399
SEQUENCE LENGTH:98
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01552
SEQUENCE DESCRIPTION:
GATCCAAGTG TAGTGGGACC CCCTACTAGG GTCAGGAAGT GGACACTAAC ATCTGTGCAG 60
GTGTTGACTT GAAAAATAAA GTGTTGATTG GCTAGAAA 98

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SEQ ID NO:1400
SEQUENCE LENGTH:104
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01553
SEQUENCE DESCRIPTION:
GATCTCCAAA GTGGTGAGTT TATGTGTGAT TTTATTTTG TTTATGCTCT TCTGTATTTT 60
CCGAATTTC TACAATAAAT ATCTGTACT TTTACAATAT GAAA 104

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SEQ ID NO:1401
SEQUENCE LENGTH:94
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01554
SEQUENCE DESCRIPTION:
GATCAGAGA GTTCAAGGGA TTGGGGAAAG AGAGGCGTCA AGTCATTTGC ACTTTGTACC 60
TGTAAGTTAG GTAATAAACT ATTATACTCG TAAA 94

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SEQ ID NO:1402
SEQUENCE LENGTH:92
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01555
SEQUENCE DESCRIPTION:
GATCTAGTNT CTNGCATTTT TATTATGTTG CTATATACTT TTGTTATCCG TATACTAAAA 60
AAAAAGAATA AATAAATGTT TTGATTGTTA AA 92

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SEQ ID NO:1403
SEQUENCE LENGTH:92
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01556
SEQUENCE DESCRIPTION:
GATCTNTACA TTCTTCAGAC TCATCGTGTG TTTGANACTT TTTATAATGA ACATATATCA 60
TTTTNNTTAG AAAAGAATAA AGTTTTTGAA AA 92

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SEQ ID NO:1404
SEQUENCE LENGTH:119
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01557
SEQUENCE DESCRIPTION:
GATCCTCTGG GGAAGCCAGG ACCAGGAGAG AAGCAAGGTC AAGAAATCCC ACAGTTTGAT 60
GTATTAAAGA AATNACTTAT TTCTACTCAA AATAAATGGC ATTGAAGTCT TTCTTTAAA 119

SEQ ID NO:1405
SEQUENCE LENGTH:90
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01558
SEQUENCE DESCRIPTION:
GATCTTGTGT CTCCTCTCCA TCTCTGCCTT TGTTACCAGT GTGCATGTGT TTGTGTGTTT 60
TTTAATAAAA TATTGACTCG GCCAGTTAAA 90

SEQ ID NO:1406
SEQUENCE LENGTH:90
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01560
SEQUENCE DESCRIPTION:
GATCTGTTAT GGCATTCACT TCCAGATTAA TTTTCCGTGT TTGAAGTATG TNCATATGTN 60
CTTTACAGAA TAAACATCT GAATTTTAAA 90

SEQ ID NO:1407
SEQUENCE LENGTH:87
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01561
SEQUENCE DESCRIPTION:
GATCCATTTT CTTTCAAAAT TTTCTTTATT GTAAAGTATG CAAAATATAT ATTCATACGA 60
TTTATTAAAT CAGAATGTTT ATACAAA 87

SEQ ID NO:1408
SEQUENCE LENGTH:85
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01562
SEQUENCE DESCRIPTION:
GATCTGGAAT CCTTTTCTG CATTGACAAG GACCACAGCT AAAGGACAAT AATATGAATG 60
ACTCATTAAT ATCTCAAAAC TTAAA 85

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SEQ ID NO:1409
SEQUENCE LENGTH:85
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01563
SEQUENCE DESCRIPTION:
GATCCAAGTT ATNTTNAGAA GAAAAACCTA ATTGAACAGG TATGGGTTGG GAGCATAATA 60
AATGTGTTTT GAGAATTGTT CTAATA 85

SEQ ID NO:1410
SEQUENCE LENGTH:84
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01564
SEQUENCE DESCRIPTION:
GATCATTATT TCATGACTGG TGGGTTCTTA AACTCTGAAA TCAGCCTTGC ACAAGTACTT 60
GAGAATAAAT GAGCATTTTT TAAA 84

SEQ ID NO:1411
SEQUENCE LENGTH:84
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01565
SEQUENCE DESCRIPTION:
GATCTAAGCC CATGAGCACA GGGACTGGCT ATCCCAAGAC CTGGCAGATG TGGCTGCTCA 60
ATAAACACTT GTTGAACCAT CAAA 84

SEQ ID NO:1412
SEQUENCE LENGTH:86
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01566
SEQUENCE DESCRIPTION:
GATCACCCAA GGGTTTTTTT GTGTCGGACT ATGTAATTGT AAATAATACC TCTGGTTCCC 60
CATTAAAAGT NCCCATTTNA GTTAAA 86

SEQ ID NO:1413
SEQUENCE LENGTH:83
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01567
SEQUENCE DESCRIPTION:
GATCTGTGTT TGTATCCCTT TATGTAATGT AAAATTTAAG GGTATTTTGA TTCTAAATAT 60
GATAAAATAA TTTCTCACCT AAA 83

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SEQ ID NO:1414
SEQUENCE LENGTH:83
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01568
SEQUENCE DESCRIPTION:
GATCAGCAGT CCACCACAAA AGCTTCTGTT AAAAGACCCT ACACAAATGC ACAAATTCAG 60
ATTAAACAAG GAAAAGACGG AAA 83

SEQ ID NO:1415
SEQUENCE LENGTH:83
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01569
SEQUENCE DESCRIPTION:
GATCTTGGTG TTCAAAACAG AACTGTATTT TTGCCTTTAA AATTAAATAA TATAACGTGA 60
ATAAATGACC CTATCTTTGT AAA 83

SEQ ID NO:1416
SEQUENCE LENGTH:82
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01570
SEQUENCE DESCRIPTION:
GATCCTTCTG TAAAGGTTTT TGGAATTATG TCTGCTGAAT AATAAACTTT TTTGAAATAA 60
TAAATCTGGT AGAAAAATGA AA 82

SEQ ID NO:1417
SEQUENCE LENGTH:86
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01571
SEQUENCE DESCRIPTION:
GATCTGCATA TTTCTGTATA TTTGTCATGA CAGTGCTTGC ATCCTATTTG GTGTACTCAG 60
CAAATAAACT TTTCAATTTA AACAAA 86

SEQ ID NO:1418
SEQUENCE LENGTH:81
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01572
SEQUENCE DESCRIPTION:
GATCCCAACA TGGTCCTAGC ACTGCACACT CAGTTTTNCT CTAAGAAGCT GCAATAAAGT 60
TTTTTNAAGT CACTTTGTAA A 81

5 SEQ ID NO:1419
 SEQUENCE LENGTH:81
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01573
 SEQUENCE DESCRIPTION:
 10 GATCTTCANT TAATCNCCT TAAAAATGA CAAAACATG TCTTCTTGA ATTAACTTTG 60
 AATAAAAGTT TGTATATTAA A 81

15 SEQ ID NO:1420
 SEQUENCE LENGTH:81
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01574
 SEQUENCE DESCRIPTION:
 20 GATCAGAGCT CAGTTCCTGT AGAAAACGAA CTGTAAAAGA CCATGCAAGA GGCAAAATAA 60
 AACTTGAAGT GAATGCTTAA A 81

25 SEQ ID NO:1421
 SEQUENCE LENGTH:80
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01575
 SEQUENCE DESCRIPTION:
 30 GATCTTGGGT TTGGTCTACC CACCCAAGAG AAAAGACTGT TAACTGGAAG AAAAAATATA 60
 TATATNNAAT TTTATGTAA 80

35 SEQ ID NO:1422
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01576
 SEQUENCE DESCRIPTION:
 40 GATCACAATT ACCTTTAGTT GTTTTTTTG TAATAATTGT AGCCAAGTAA ATCTCCAATA 60
 AAGTTATCGT CTGTACAAA 79

45 SEQ ID NO:1423
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01577
 SEQUENCE DESCRIPTION:
 50 GATCCTTATG AATGACAGGT TACTGTTTTG CTTATTGCT TAACTTAATG TAGTGAAATA 60
 AAGCAGACAA AGCTTGAAA 79

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5 SEQ ID NO:1424
SEQUENCE LENGTH:79
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01578
SEQUENCE DESCRIPTION:
GATCTTCTGC ATGAGACCTG GAGTTGGGGA AGCAAGGTTA CATTGTATT NGTTTATCCT 60
10 ATGAATACTN TTCTCAAA 79

15 SEQ ID NO:1425
SEQUENCE LENGTH:78
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01579
SEQUENCE DESCRIPTION:
GATCAGGCAG TCTGCTCAGA TACATTGAGT GCGGATTTTA AGTTTGT TTGAAAAATA 60
20 AACAGATTAA CCTGCAAA 78

25 SEQ ID NO:1426
SEQUENCE LENGTH:78
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01580
SEQUENCE DESCRIPTION:
GATCTAAATT TCTAATGTGT TCTATGGGTT TCAATTCTGA AAAAAGAAAA TGAATAAAGA 60
30 TTTTAATAAA TATTGAAA 78

35 SEQ ID NO:1427
SEQUENCE LENGTH:78
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01581
SEQUENCE DESCRIPTION:
GATCTTCATT GTGCTGGGTG CCAGGNCAGT NATCCATTTT AAAATTGTGA ATTCAATAAA 60
40 GTTTTTTTTG TTNTTAAA 78

45 SEQ ID NO:1428
SEQUENCE LENGTH:77
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01582
SEQUENCE DESCRIPTION:
GATCTCCAGG CTTGGCCTCC AGAGCAGCCC ACACCAACNC CAAAATAAAA AAATGTATAT 60
50 ATTCCTTTAG CTCTAAA 77

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5 SEQ ID NO:1429
 SEQUENCE LENGTH:76
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01583
 SEQUENCE DESCRIPTION:
 GATCCCAGGG ACCTCAGTCG GCTTAATCAG AGTGTGGCAT AGAAGCTATT TAATGATTAA 60
 10 AGTCATTTC AGTAAA 76

15 SEQ ID NO:1430
 SEQUENCE LENGTH:76
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01584
 SEQUENCE DESCRIPTION:
 GATCAAACCTT TTATGTTCT TAATAAGCTT GCAATTGANT AAAATAGAAT ATAAAAATAA 60
 20 GGTGAAATAA TATAAA 76

25 SEQ ID NO:1431
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01585
 SEQUENCE DESCRIPTION:
 GATCCCAAGT ACAATGAAAA GTTGTCACTG TATGCTGGAC GGCATTCCTG CTTATCAATA 60
 30 AACCTGTTTG TTTTACAAA 79

35 SEQ ID NO:1432
 SEQUENCE LENGTH:75
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01586
 SEQUENCE DESCRIPTION:
 GATCTCCAAC NTTGAAAAAT ATACATGATG TGAACTGNG GGTNCTATGT TAAAAATAA 60
 40 TGTATGATAA CTAAT 75

45 SEQ ID NO:1433
 SEQUENCE LENGTH:74
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01587
 SEQUENCE DESCRIPTION:
 GATCCAAACA TTTTTTGTG TGTGTATGGC ATTGATGCAG AATAGAATAA AATTATACTT 60
 50 AAGTTCTTTT TAAA 74

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5 SEQ ID NO:1434
SEQUENCE LENGTH:73
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01588
SEQUENCE DESCRIPTION:
GATCCCGGCG CGGGAAAGTC ACAGAGCTGC CTGGGCTTGT ACCTGGNCAC ATAAAGCCCC 60
ANTTTAAAGC AAA 73
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15 SEQ ID NO:1435
SEQUENCE LENGTH:73
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01589
SEQUENCE DESCRIPTION:
GATCCCANAG CNATAAATA AAATTTTATT CCAAATAAC AAAACAAATT NATCTACTGT 60
ACACAATCTG AAA 73
20

25 SEQ ID NO:1436
SEQUENCE LENGTH:72
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01590
SEQUENCE DESCRIPTION:
GATCCCAGGC TTCTGCGGAC CGACGATACG TTAAATGTT GTTCTAGTAA AGTTTTCGAT 60
ATGTTTCTGA AA 72
30

35 SEQ ID NO:1437
SEQUENCE LENGTH:71
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01591
SEQUENCE DESCRIPTION:
GATCCCTTGG NGGNCTAGTT CGTATTTTGG TTTAAACTA TTTGTTAGAA TAAAGTAATT 60
TTGCTAATAA A 71
40

45 SEQ ID NO:1438
SEQUENCE LENGTH:70
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01592
SEQUENCE DESCRIPTION:
GATCTTAAGT ATAAAAATTT TGTAATTGGG CCTTTACTCT CTCAATAATA AAGTATTTTG 60
TTTATATAAA 70
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SEQ ID NO:1439
 SEQUENCE LENGTH:68
 SEQUENCE TYPE:nucleic acid
 5 TOPOLOGY:linear
 CLONE:HUMGS01593
 SEQUENCE DESCRIPTION:
 GATCTGTATT TTCTAAGTCC CCAGTTCTCC TGGCTCTCCT TTCTGAAATA AAGGATTGAA 60
 AACNGAAA 68
 10

SEQ ID NO:1440
 SEQUENCE LENGTH:67
 SEQUENCE TYPE:nucleic acid
 15 TOPOLOGY:linear
 CLONE:HUMGS01594
 SEQUENCE DESCRIPTION:
 GATCTGTTTT TAAAAATCAT AAAGTGTGTG CAGACTCAAT AAAATCATGT ACATTCTGA 60
 AATGAAA 67
 20

SEQ ID NO:1441
 SEQUENCE LENGTH:71
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS01595
 SEQUENCE DESCRIPTION:
 GATCAACAGT TACTGTNACT GAGTCGGCCC ATTCTGTTA GAAATATATT TNAAATGTTT 60
 AGTAATTGAA A 71
 30

SEQ ID NO:1442
 SEQUENCE LENGTH:66
 SEQUENCE TYPE:nucleic acid
 35 TOPOLOGY:linear
 CLONE:HUMGS01596
 SEQUENCE DESCRIPTION:
 GATCTGCCAT TTCATGCCNT GTGACTACNN ATCATTGGCC CTGCAATAAA ATCATTTATT 60
 TTAAAA 66
 40

SEQ ID NO:1443
 SEQUENCE LENGTH:64
 SEQUENCE TYPE:nucleic acid
 45 TOPOLOGY:linear
 CLONE:HUMGS01597
 SEQUENCE DESCRIPTION:
 GATCCTGCAT GCTACTCTTA GATAGAAGAT GGCAAAACCA TGGTATTAAA ATATGAATGA 60
 TAAA 64
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5 SEQ ID NO:1444
SEQUENCE LENGTH:64
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01598
SEQUENCE DESCRIPTION:
GATCAAGTCA CTNTTGACAA CATCCAGGNG AATATAAAAA CTTAATAAAG CTGTGGAAAG 60
10 GAAA 64

15 SEQ ID NO:1445
SEQUENCE LENGTH:62
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01599
SEQUENCE DESCRIPTION:
GATCAATTGG TTAACTTCT TTTATGTAAG TATGGTATAT AAATTCAAG ACGAACACTA 60
20 AA 62

25 SEQ ID NO:1446
SEQUENCE LENGTH:62
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01600
SEQUENCE DESCRIPTION:
GATCACTTTT CACTTTTGG AATGTTTTGT ATTGAACTT AATAAACTT TAACATGGCA 60
30 AA 62

35 SEQ ID NO:1447
SEQUENCE LENGTH:62
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01601
SEQUENCE DESCRIPTION:
GATCGNTCTC AGGCCCTCCC CCCGGAGTAC TTCAGAATGC AATAAATCAA AATAATGGCA 60
40 AA 62

45 SEQ ID NO:1448
SEQUENCE LENGTH:62
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01602
SEQUENCE DESCRIPTION:
GATCTGTATG TGTTCTATTC AGCACAAGGA AATAAAATTT TAGTTGAGGA TTCAGCACTA 60
50 AA 62

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5 SEQ ID NO:1449
 SEQUENCE LENGTH:62
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01603
 SEQUENCE DESCRIPTION:
 GATCCCCATT CTTTCAAAA ACAAATAAA ACAATAAGA CTGCAAGGAA GACTGANGGA 60
 AA 62

15 SEQ ID NO:1450
 SEQUENCE LENGTH:62
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01604
 SEQUENCE DESCRIPTION:
 GATCCAGTCT GGAATAACAT TTTGTAAAA AAAATATAT ATATATATAT ATATNGCTGA 60
 AA 62

25 SEQ ID NO:1451
 SEQUENCE LENGTH:61
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01605
 SEQUENCE DESCRIPTION:
 GATCGGGGGC ACCAGAGGGG CAGAGGCACC AACATCTGAA TAAAGCCATT GTTCTCCCAA 60
 A 61

35 SEQ ID NO:1452
 SEQUENCE LENGTH:61
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01606
 SEQUENCE DESCRIPTION:
 GATCTTGGAC NTCTCGCATT CAGAACTGTG AGAAATAAAT ATCTATTATT TACAAATTAA 60
 A 61

45 SEQ ID NO:1453
 SEQUENCE LENGTH:60
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01607
 SEQUENCE DESCRIPTION:
 GATCTCCGTC TTGTATGGCT GAATGTTGGC CTAAAATAAA GATTACTGTT GTAAAATAAA 60

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5 SEQ ID NO:1454
SEQUENCE LENGTH:62
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01608
SEQUENCE DESCRIPTION:
GATCTGTGGA GAATGTACAC AGTTTAAACA CATCAATAAA TACTTTAACT TCCACCGAGA 60
AA 62

15 SEQ ID NO:1455
SEQUENCE LENGTH:72
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01609
SEQUENCE DESCRIPTION:
GATCAAGAAT CCTGCTCCAC TAAGAATGGT GCTAAAGTAA AACTAGTTTA ATAAGCAAAA 60
AAAAAACCA AA 72

25 SEQ ID NO:1456
SEQUENCE LENGTH:59
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01610
SEQUENCE DESCRIPTION:
GATCTAGATG TTTCTTTAAC CAAGATGAAT TAAATATAG TAGAGTTCCA CTGTNCAAA 59

30 SEQ ID NO:1457
SEQUENCE LENGTH:63
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01611
SEQUENCE DESCRIPTION:
GATCAAATTG TACCTTTTGA GAGAAAAGGA CCAAAATAAA AGAAAAATGA ATTATGAACT 60
AAA 63

40 SEQ ID NO:1458
SEQUENCE LENGTH:59
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01612
SEQUENCE DESCRIPTION:
GATCAGCAGT CTTGGATGGN AGGNAACAAA GCTAAATAAA TGTTAGTTTG GTGAGCAAA 59

50 SEQ ID NO:1459
SEQUENCE LENGTH:65

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01614
 SEQUENCE DESCRIPTION:
 5 GATCTCCCTT ATATTCTTAT GATGAGGCTA AATAAAAGTC TAATAAAAAT GTTAAATATG 60
 TGAAA 65

SEQ ID NO:1460
 10 SEQUENCE LENGTH:56
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01615
 SEQUENCE DESCRIPTION:
 15 GATCAAAATC AAGTTTAAAG TTTTITGAC CAGATAAATT TAATGATTTT GGCAAA 56

SEQ ID NO:1461
 SEQUENCE LENGTH:58
 20 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01616
 SEQUENCE DESCRIPTION:
 25 GATCTTAATT ACTTTCAGAA TATTTTCAAA ATAGATATAT TTNAAAATC CTTACAAA 58

SEQ ID NO:1462
 SEQUENCE LENGTH:55
 SEQUENCE TYPE:nucleic acid
 30 TOPOLOGY:linear
 CLONE:HUMGS01617
 SEQUENCE DESCRIPTION:
 GATCGTTCTT CTCTCCGTAT TGGGGAGTGA GAGGGAGAGA ACGCGGTCTG AGAAA 55

SEQ ID NO:1463
 SEQUENCE LENGTH:55
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 40 CLONE:HUMGS01618
 SEQUENCE DESCRIPTION:
 GATCCCTGAG ACGGGGTAAG TTATAATAAA CAGAAATGTA TTGGCTCAGA AGAAA 55

SEQ ID NO:1464
 SEQUENCE LENGTH:55
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01619
 SEQUENCE DESCRIPTION:
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GATCTGTTAT GTATTTC AAC ATAATCATGT TTCATAAAGA TTTAGTCTTC TGA AAA 55
 SEQ ID NO:1465
 SEQUENCE LENGTH:56
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01620
 SEQUENCE DESCRIPTION:
 GATCCACCT TTGCTCCTGA CAACCCTCAT TTCAATAAAG ACCAGTGAAG ACCAAA 56
 SEQ ID NO:1466
 SEQUENCE LENGTH:54
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01621
 SEQUENCE DESCRIPTION:
 GATCAGAATC CTGCTCCACT AAGAACGGTG TAAAGTAAAT TAGTTATAAG CAAA 54
 SEQ ID NO:1467
 SEQUENCE LENGTH:63
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01622
 SEQUENCE DESCRIPTION:
 GATCTTGAGC CTTAACTGGA CATGAGGGGC ATGAAAATAA AGCTGAACTG CAGCCTCCTG 60
 AAA 63
 SEQ ID NO:1468
 SEQUENCE LENGTH:54
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01623
 SEQUENCE DESCRIPTION:
 GATCTTTTCT AAATGTTATT ACTTGTAAT AAAGTCTATT TTTCTCCCGT GAAA 54
 SEQ ID NO:1469
 SEQUENCE LENGTH:54
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01624
 SEQUENCE DESCRIPTION:
 GATCTGTATA TTTTTTCTA AGAGAAAATG TAAATAAAGG ATTTCTAGAT GAAA 54
 SEQ ID NO:1470
 SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01625
 SEQUENCE DESCRIPTION:
 GATCTGCGCA TATATATATA TGTATAAAAA ATAATAAAAT AATGGAAGNT GAAA 54

SEQ ID NO:1471
 SEQUENCE LENGTH:54
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01626
 SEQUENCE DESCRIPTION:
 GATCCTAAAT NCACGCACCC CGTGGGAGCN CAATAAAGAT TTACTGAATT GAAA 54

SEQ ID NO:1472
 SEQUENCE LENGTH:53
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01627
 SEQUENCE DESCRIPTION:
 GATCCGCCAT CTGTAATGTC CTTGGCACAA TAAACCAAA TGTCAGTTTC AAA 53

SEQ ID NO:1473
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01628
 SEQUENCE DESCRIPTION:
 GATCCCTAGT GATTACAGCC CTGAAGAAAA TTAAATCTGA ATTAATTTTA AA 52

SEQ ID NO:1474
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01629
 SEQUENCE DESCRIPTION:
 GATCCAGTGT GGATTCTTNG AGTAATAACG TTGGTTTTAT TTATCATATA AA 52

SEQ ID NO:1475
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01630
 SEQUENCE DESCRIPTION:
 GATCTTCAAT GTTTATTTTA AAATAAATA AAATAAGTTC TTGACTTTTA AA 52

5 SEQ ID NO:1476
 SEQUENCE LENGTH:56
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01632
 SEQUENCE DESCRIPTION:
 GATCTTGAAT GAAAGTCTTC TCAGGCTGTA GGGTGGTTCC TACAACCACA GCCAAA 56

10 SEQ ID NO:1477
 SEQUENCE LENGTH:51
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS01633
 SEQUENCE DESCRIPTION:
 GATCTCATCT GAATCCCCAA CACCCAATAA AGTTCCTTTT TAACACACAA A 51

20 SEQ ID NO:1478
 SEQUENCE LENGTH:55
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01642
 25 SEQUENCE DESCRIPTION:
 GATCAAAATC CTATTTAGAA AAAATAAAAC TACTTTCTGT TTATCTCTTT AGAAA 55

30 SEQ ID NO:1479
 SEQUENCE LENGTH:34
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01671
 SEQUENCE DESCRIPTION:
 35 GATCCAAAAA CATCCGTGAA CCTCTGTCTG TAAA 34

40 SEQ ID NO:1480
 SEQUENCE LENGTH:305
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01673
 SEQUENCE DESCRIPTION:
 GATCAAAATA AAGGATGATA ATAGATATTA TTTTNCCTTA TGACAGAAGC AAATGATGTG 60
 45 ATTTATAGAA AAACCTGGAA ATACAGGTAC CCAAAGAGTA AATCAACATC TGTATACCCC 120
 CTTCCAGGG GTAAGCACTG TTACCAATTT AGCATATGTC CTTGCAGAAT TTTTTTTTCT 180
 ATATATACAT ATATATTTT AACCAAAATG AATCATTACT CTATGTTGTT TTACTATTG 240
 TTTGACATAT CAGTATATCT GAAACACCTT TTCATGTCAA TAAATGTTCT TCTCTAACAT 300
 50 TTAAT 305

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SEQ ID NO:1481

SEQUENCE LENGTH:734

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01686

SEQUENCE DESCRIPTION:

GATCCAGCCC ATTCTCTACT CTTACTCCTT TCATGGGCCA CCAGAGCCAG TACTCTTGGA 60
TAGCAGCAGC ATTCTAGCTG ACAGAATTTT GCTGATGGAT ACTTTCTTTC AAATTGTGTCAT 120
TTATCTTGGT GAGACCATAG CCCAGTGGCG TAAAGCTGGC TACCAGGACA TGCCCGAGTA 180
TGAAAACTTC AAGCACCTTC TGCAGGCACC ACTGGATGAT GCTCAAGAAA TTCTGCAAGC 240
ACGCTTCCNG ATGCCACGTT ACATCAACAC GGAGCATGGA GGCAGTCAGG CTCGATTCCT 300
TTTGTCAAA GTGAACCCAT CTCAGACACA CAATAACCTG TATGCTTGGG GACAGGAAAC 360
TGGAGCACCC ATCCTAACTG ATGATGTTAG CCTGCAGGTG TTCATGGACC ATTTGAANGA 420
AGCTGGCTGT CTTCCAGTGG CTGTGTTAAAG CTGAGGATAC AACCAGGGAA ATGCAAACGG 480
TNTCAAGATT TGGTGGTTCA AAATTGTCTA GAAAGGGTTT GATAACCATT CCNGGTTACT 540
TTTTCTTNGG ANGTITTAAC CAAATAATCA ANGGCNATTT TATTATGGAA CCTCTTTAGG 600
TTATAATTNA TTNGGAATNC GCNCNTTGGC CTTTCTTGN CCTTTAAATT TTAAGGGAAN 660
AAANNTTGG GCNTNAGGNG GTTNNGGNTT TTTGGNNCNA ACTTTNGGGN TTAATAAANC 720
NGGGGNNTNT TAAA 734

SEQ ID NO:1482

SEQUENCE LENGTH:731

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01687

SEQUENCE DESCRIPTION:

GATCAACCGG AGCGCTTCCG AGCCATCCTT GCATCGGGCA GCCCAGCTG AGGATATCAA 60
TGCTTGACG CTGACCACGT CCCGAGGCT GCCTGTNTTC TAGTTGACTT TGCACCTGTN 120
TTCAGGCTGC CAGGGGAGGA GGAGAAGCCA GCAGGCACCA CTTTCTGCT CCCTTCTCC 180
AGAGGCAGAA CACATGTTTT CAGAGAAGCT GCTGCTAAGG ACCTTCTAGA CTGCTCACAG 240
GGCCTTAACT TCATGTTGCC TTCTTTTCTA TCCCTTTGGG CCCTGGGAGA AGGAAGCCAT 300
TTGCAGTGCT GGTGTGTCCT GCTCCCTCCC CACATTCCCC ATGCTCAAGG CCCAGCCTC 360
TGTAAGTGG CAAGTGGGAT GTTGATGGTA GTACAAAAAG CAGGGGCCCA GCCCAGCTGT 420
TGGCTACATG AGTATTTAGN GGGAAAGTAAG GTAGCAGGCA GTCCAGCCCT GANNTTGGAG 480
ACACATGGGG TTTTGGAAA TAAGNTTCTT GNGGGATGAA TGTAACAGGN GGGNTTCTT 540
CANGGAGTGG TNCAGCNCAG ACATTTNNAC ATAAGGACCA AACAGCCCAG NNTNCCGNAT 600
TTTGNCNCCC AAGNGCCTTT TTTGGACTTG GANCTTTNTT NGGGGAAAGC CNCTTNAANG 660
TTTAAGNGCC AGNATNGGTG TTTGNGAAG NATTGCCATC CGATTTAGCC TTTANGGGAN 720
GTTCCANAAG N 731

SEQ ID NO:1483

SEQUENCE LENGTH:687

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01688

SEQUENCE DESCRIPTION:

5 GATCGGTGGC TCCATCCTGG CCTCACTGTC CACCTTCCAG CAGATGTGGA TTAGCAAGCA 60
 GGAGTACGAC GAGTCGGGCC CCTCCATCGT CCACCGCAAA TGCTTCTAAA CGGACTCAGC 120
 AGATGCGTAN ATTNTGCTGC ATGGGTAAAT TGAGAATAGA AATTTGCCCC TGGCAAATGC 180
 ACACACCTCA TGCTAGCCTC ACGAAACTGG AATAAGCCTT CGAAAAGAAA TTGTCCTTGA 240
 AGCTTGATC TGATATCAGC ACTGGATTGT AGAACTTGTT GCTGATTTTN ACTTTGTATT 300
 10 GAAGTTAACT GTTCCCCTTG GTATTAACGT GTCAGGGCTG AGTGTCTGCG GATTTCCTTA 360
 GAGGCTGGCA AGAACCAGTT GTTTGTCTT GCGGGGTCTT GTCAGGGTTG GAAAAGTCCA 420
 AGCCGTAGGA CCCAGTTTC CTTTCTTAAG CTGATGTCTT TTGGCCAGAA CACCGTGGGC 480
 TNGTTAATTG CTTTAAAGTT GGAAGCGGT TTGCAATTAC GGCNCTAAAA NGTATTCATC 540
 CTNAATTNAA GGAAGGGTT TTTTGTGAC CGAAANNCG ATTCTTTGAA GNGNTGNCAC 600
 15 CAAATTTTGG GTTTCANCC GGTAAAGGGN GACATTAGGN CCCAGNACAA GGNATTNTGA 660
 AAGGGAANAN AANGGCNNCC GAAAAAN 687

SEQ ID NO:1484

SEQUENCE LENGTH:649

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01689

SEQUENCE DESCRIPTION:

25 GATCAAACTG TATTGCCAG GCCAGCTCCT GAAGAACTGT GAACTATGAA CGTCTCAGCC 60
 TAGAAGGATA ATGTGACCTT CAATTTGCAC ACCATCCATT GTCTCTTTCA AACTAAGAGC 120
 CTCTCTAAGC TAGATAGGCC AAGGATTATT TTTTAACTT TTATTTTAGG TTCAGGGGTA 180
 CATATACAGG TTTGTTACAT AGGTAACCTC ATGTCATGAG GGATTTTGTG TAGATTATTT 240
 30 GGTGACCCAG GTACTAAACC TAGTACCCAT TAGTTGTTT TNCTGCTCCT CTCCTCCTC 300
 TCACCTCCA CCTCAGTTA GTTCCCAGTG TGTGTTGTTT CCCACATCT ATCCATGTGT 360
 TCTTATTATT TAAGTCCCA CTTATAAGTA AGAACATGCA GTGTTTGTTT TTCTGTTCCC 420
 GATTAGGTAA TGCTGAGGGA TAATGGCTTC CAATTNCCAT CCATNGTTTC TGCAAAGGAN 480
 CATGNCTCA TTNCTTTAAA TATGGGCTNG CATAGNNGTT CCATGGGNGG TGAATGTACC 540
 35 ACATTTTCCT TTNANCCAGG TCTNATCAAT TGGNGGGCCA TTGNGGGTGA TTCCAAGGCT 600
 TNGGTAATGG TGAANAGGGC ACAATAANCC AGTACCATGG GGCATGAAA 649

SEQ ID NO:1485

SEQUENCE LENGTH:549

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01691

SEQUENCE DESCRIPTION:

45 GATCCTCTGA TGGGAGCTGA AAGGATGAGA GGTGGGCATC TAGATTTAGG GAGGCTGTTC 60
 AGGCTTTGCA GGTCCCTTAC CTGAACACAT AGAAACCCTG GAGCTGTGAC TGTGTCCATG 120
 TGTGTGTGTT TGTCTGTGTG TGTGCGGGG GATGGGCACC TGCATGAATG TGGTAGAGAA 180
 AATGGCTCTG CTCAGAGGGA AGATACGCAT AGCAAGGCAG GGACCAGAGG AATCACAGGC 240
 50 GCCTGGAGAG CAGCCGGGCA ACGNCTCCAG GGACCTGCCG GCTTCCCTCA GTCTCCAGG 300
 GGCCAGCAC TCTTCCTTA GGCCTGTGA GCGTCCCTTG TCAGGATACA TTCTCTCATT 360

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TTGCTGAAGC TGATTGATT GGGTGTCTGT TTCTCGCAGC CAAAAGAGCT CTGAAATGAG 420
 GAAAGTGCTT CTGTGCTAAC TCCCCGGGTC TCCTGAATTT CAGTCATTCA TGTACCCGCC 480
 TCGAAATTTT TTGCAATATC TGTGTACCCA ATGTCCATTT AATTAATAAA GAAGTTTTCT 540
 TAAATTAAT 549

SEQ ID NO:1486

SEQUENCE LENGTH:543

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01692

SEQUENCE DESCRIPTION:

GATCGANGTT TACCTTGTGT CAGGAAAAA TGTGGGGTAT GCCAAGTATG CCGATAGAAT 60
 AAGTNCTAAT GATGCCACTN GCCACTCTAC ATNGAAAGAT TCTGAATGGG GTGAGACTTA 120
 AAGTTATGCT GGCAGATTCT CCAAGAGAAG AATCTAACAA ACGGCAAAGA ACTTACTGAT 180
 TCTTGAGAAC ACCCGACTAA ATAATGACAT ANTCCTCAGC TGACTGACTG AAAATGTGAC 240
 TGGACGCATT CCCTGTGGAC AGTTGACAGC TTTTTTTTTT TCCATATACC TGNTAGTCTG 300
 TGTCCAGCAT TGTTTTGTCT GGGGAGCAGG GTTTGCTGNC ATGTATTTTN NATTCATAC 360
 ATTANTGCTA AACCGNTTAT AGTAGTTGTN CCTTAGNGCA NTATGTTGTT ACGTGATGCA 420
 GAANTAAAGT TTTCTTTGCT TTANCTAAAT CATGNCTTTA TTTNTGNGAA GGCCAGGACC 480
 GGGAAATTTT ATTNGNCAGT CTTTGGNTTT TGCCTAATGN CATTGNCATG NNTTTGGGGT 540
 NCN 543

SEQ ID NO:1487

SEQUENCE LENGTH:533

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01693

SEQUENCE DESCRIPTION:

GATCCAGAGT TGCATACAGA CCAATTTCTG CATCAGTGT ATCTCGACCA GAGGCTAGTA 60
 GGA CTGGAGA GGGCTCTACG GTATTTAATG GGGCCCAGAA TGGTGTGTCT CAGCTAATCC 120
 AAAGGGAGTT TCAGACCAGT GCAATCAGCA GAGACATTGA TACTGCTGCC AAATTTATTG 180
 GTGCAGGTGC TGCAACAGTA GGAGTGGCTG GTTCTGGTGC TGGTATTGGA ACAGTCTTTG 240
 GCAGCCTTAT CATTGGTTAT GCCAGAAACC CTTCGCTGAA GCAGCAGCTG TTCTCATATG 300
 CTATCCTGGG ATTTGCCTTG TCTGAAGCTA TGGGTCTCTN TTGTTTGATG GTTGCTTTCT 360
 TGATTTTNTT TGCCATGTAA CAAATTACTG CTTGACATGT TGGCATNCAT ATTAATTACG 420
 GATGNAATCC TGGGNANCTA CCTGTNCCTC CGAAAACCTG TAGGTANTTG GGGGTCANGG 480
 GGAATTGNNC GGTAAATCCC AAAGCCATTT NATTAAGGN GGAAACCTTT AAA 533

SEQ ID NO:1488

SEQUENCE LENGTH:531

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01694

SEQUENCE DESCRIPTION:

GATCCAAAAG ANCTGCTTTC TGAAGCAAGT TTCCAAGANG CTCTTCAGGA AAGCATTCTT 60

GACATTCAAG CGCACGAGTG GGTGCCGCTG TGGCTACTGC GGTATTCGGT CATTGTGAAA 120
AGTAGAGGAA TTATCAAATC AAAAGGCTAC ATTTTACAAG CTAAAAGAAG GGGTTCTTAA 180
CTGACTTAGG AGCATAACTT ACCTGTAATT TCCTTCAATA TGAGAGAAAA TTGAGATGTG 240
TAAAANTCTA GTTACTGCCT GTAAATGGTG TCATTGAGGC AGATATTCTT TCGTCATATT 300
TGACAGTATG TTGTCTGTCA AGTTTTAAAT ACTTATCTNG CCTCCATATC AATCCATTCT 360
CATGAACCTC TGTATTGCTT TCCTTAAACT ATTGNTTTC TAATTGANAT TGTCTATANG 420
GANATNCTTG CAATATATTT NNNCNTTANT TTTTATGNCT AATATNAATN CAGGNNAATT 480
TGTTGTTTGG TATTTTGGG CNNGGGTTCC GGGGAATGNT TNTNCANTTT N 531

SEQ ID NO:1489

SEQUENCE LENGTH:526

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01695

SEQUENCE DESCRIPTION:

GATCGGCGTG ACCANCCCTT GCCGGAGGTG GCCCATGTCA AGCACCTGTN TGCCAGCCAG 60
AAGGCACTGA NAGGAGAAGG AGAAGGCCCTC CTGGAGCAGC CTCTCCATGG ATGAGAAAAGT 120
CGAGTTGTAT CGCATTAAGT TCAAGGAGAG CTTTGCTGAG ATGAACAGGG GCTCGAACGA 180
GTGGAAGACG GTTGTGGCGG GTGCCATGTT CTTTCATCGGT TTCACCGCGC TCGTTATCAT 240
GTGGCAGAAG CACTATGTGT ACGGCCCCCT CCCGCAAAGC TTTGACAAAG AGTGGGTGGC 300
CAAGCAGACC AAGAGGATGC TGGACATGAA GGTGAACCCC ATCCAGGGCT TAGCCTCCAA 360
GTGGGACTAC GAAAAGAACG AGTGAAGAA GTGAGAGATG CTTGGCCTNC GGCTTCAACT 420
TGCGGCTGGC TCTTTCACCG CCATGCAAAC TCCATGCCTA TTTACTNGGA AACCTGTTAT 480
NCCAAACAGT TGTNCNCTGC TAATAAATTG NCCAGTTTAC CTGAAA 526

SEQ ID NO:1490

SEQUENCE LENGTH:525

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01696

SEQUENCE DESCRIPTION:

GATCAGCAGA GGNATCAAAC CAACACCTTC TTTGGCTCCC CTCCCGCAGC CACAGAGGCA 60
ACCCACGTTG TCAGCACCAT CCCTGAGTCA TTACAATAGC ACCCTGCAGC TATGCTGGAA 120
AACTGAGCGT GGGACCCTGC CAGACTGAAG AGCAGGTGAG CAAATGCTG CTTTCTGCCT 180
TGGTGGCAGG CAGAGAACTG TCTCGTACTA GAATTC AAGGAGAAAG AAGAAATAAA 240
AGAAGCTGCT CCATTTTCA TCATCTACCC ATCTATTGGA AAAGCACTGG AATTCAGATG 300
CAAGAGAACA ATGTTTCTTC AGTGGCAAAT GTAGCCCTGC ATCCTCCAGT GTTACCTGGT 360
GTAGATTTTT TTTTCTGTAC CTTTCTAAAC CTCTCTCCC TCTGTGATGG TTTTGTGTTT 420
AAACAGTCAT CTNCTTTTAA ATAATATCCA CCTNTCCTTT TTGCCATTTC ACTTATTGGN 480
TCCATAANGT GAATTTTAAT TTAAGGTTAT GCCACACATG CATGN 525

SEQ ID NO:1491

SEQUENCE LENGTH:522

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01697

SEQUENCE DESCRIPTION:

5 GATCAGCTGT TTGTCATAGG GCAGTTGGAA ACGGCCTCCT AGGGAAAAGT TCATAGGGTC 60
 TCTTCAGGTT CTTAGTGTCA CTTACCTAGA TTTACAGCCT CACTTGAATG TGTCACACT 120
 CACAGTCTCT TTAATCTTCA GTTTTATCTT TAATCTCCTC TTTTATCTTG GACTGACATT 180
 TAGCGTAGTA AGGTGAAAAG GTCATAGCTG AGATTCTCTG TTCGGGTGTT ACGCACACGT 240
 ACTTAAATGA AAGCATGTGG CATGTTTCATC GTATAACACA ATATGAATAC AGGGCATGCA 300
 10 TTTTGCAGCA GTGAGTCTCT TCAGAAAACC CTTTCTTACA GTTAGGGTTG AGTTACTTCC 360
 TATCAAGCCA GTACGTGCTA ACAGGCTCAA TATTCCTGAA TGAATATCA GNCTAGTNGN 420
 CAAGCTCCTG GTCTTGAGAT GTCTTCTCGT TAAGGAGATG GGCCTTTTGG GGGTAAAGGN 480
 TAAAATGGAT GAGGTCTGNC ATGNTTCACT ATTCTAGGAC TN 522

SEQ ID NO:1492

SEQUENCE LENGTH:509

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20 CLONE:HUMGS01698

SEQUENCE DESCRIPTION:

25 GATCCCAACA ATATTCCCAA GGCCTCAATG ACAAGTGGTT TGGTTCAGCA GTTCCAACAC 60
 ACAGTCCTTC CCTCAGTGAC TCCCTTGGNN CCCTCATCTG CACACTGATT GCCATATTGC 120
 CCTCTATTTT CTGTCTTTGG TTTAAACCCC AAGGGCCCAG AGGCTTTCTC CGATGTCTAA 180
 CTCTTTGTGC CTGAGCTCC TTTATGTTTG GGTGGCATGT TCATGAAAAA GCCATACTTC 240
 TAGCAATTCT CCAATGAGC CTTTGTCTG TGGGAAAAGC AGGAGACGCT TCGATTTTTC 300
 TGATTCTGAC CACAACAGGA CATTATTCCC TCTTCTCTCT GCTCTTCACT GCACCAGAAC 360
 TTCCCATTA AATCTTACTC ATGTTACTAT TCACCATATA TAGTATTTCG TCACTGAAGG 420
 30 ACTTTATTCA GAAAAGGAAA AACCTCTTTT TTAATTGGGA TGGGAACTTT CTANCCTGCT 480
 TTGGNCNGGG GGCCTCTGGG AAGGNCTTN 509

SEQ ID NO:1493

SEQUENCE LENGTH:497

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01699

SEQUENCE DESCRIPTION:

40 GATCCTGTCA AAATAGTCCG ATGCCATGAA CATATAGAAT CCTTACAGTA AATGGAGAAT 60
 TACTCTTTTT TAGACAAAGA GAAGGGCCTT TTTATCCAAC CCTAAGATTA CTTACACAAAT 120
 ATCCTTTTAT CCTGCCACAC CAGCAGGTTG ATAAAGGAGC CATCAAATT GTACTCAGTG 180
 GAGCAAATAT CATGTGTCCA GGCTTAACCT CTCCTGGAGC TAAGCTTTAC CCTGCTGCAG 240
 45 TAGATACCAT TGTGTCTATC ATGGCAGAAG GAAAACAGCC TGCTCTATGT GTTGGAGTCA 300
 TGAGATGTCT GCAGAGNCAT TGNGAAGTCA CCAAAGGATT GGCATTGAAA ATATCCATTA 360
 TTTAAATGAT GGGCTGTGGN TATGAGGCAT ATAAATGNCG TCAGAGGGAT GCACTTGGGT 420
 NAATATGGNT ATTGTGCTGT ATCTGTGTTG TGNCTGTGTG TGCANCTGAG GTATGCCTGT 480
 50 GGTNTGCTGA TAAATCN 497

SEQ ID NO:1494

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EP 0 679 716 A1

SEQUENCE LENGTH:472

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01700

SEQUENCE DESCRIPTION:

GATCAAAATA TCATGGATTG AACCTCATCA ATTGATAGCA GTGAGTGACT GANGCTTCCA 60
AATCAAGAAA AGCCGGCACC AAGAACTTCC ATTCTAATCT AGAGCTGACC AGTTTGAGCT 120
GATTCTNTCT TTGAAGAGTC CTTCTTGATT GCAGTGCAGT ACTGGCATT CTGAATGGAT 180
GTANGNGGAG TATTTTAGTC TAAAGGCTTT TCAAATTACT TGAATTTTTT TAAAAATTGA 240
GGAGCTTTAT TTCTATTTAC CCTTCCATTT TTGTATATCA AATTTCCATN GTCATTAAAA 300
ACTGTATCTT GAAACTTTGT GAACTGACTT GCTGTATTTG CACTTTGAGC TCTTGAAATA 360
ANTGTGATTT TNGTGTGATT ATCTGGTTTC CNGTTTAAAC CATTACCTGT CACCNTTAT 420
CCTTAACCTT GAAAGTCCAG AAACCATNNN ATTATTAAGG TNGTCCAATA AA 472

SEQ ID NO:1495

SEQUENCE LENGTH:496

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01701

SEQUENCE DESCRIPTION:

GATCTGTGTG GATGGCAAAC TCCCCAGGCC ATTCTGGGAC CTAAGTTTAA GAAGTGCCGT 60
CCTCGAACTT NCTGACTCTA AGCTCCTGAG CGGGAGTNAG ACTTAGCCCT GAGCCTGCAC 120
TTCTGTTC GGTGCAGACA CTGAACAGGG TCTCAAACAC CTTGAGCATG TNTNTTGTGT 180
GCTCACGTGC CACACAGTGT CTCATGCACA CAACCCAGTG TACACACCAC CTACATGCAC 240
ACAGCGTCCT TNCACACTGT GTATGTGAAC AGCTTGGGCC CTGCAACACA ACCATCTACA 300
CACATCTACA ACCNNAGGA CACACACATG GGTCCGTGCC ATGTCACCTC CNTAGGGGAN 360
GGNTTCTTT CCAAGGTGTN GCCAGGCCAG GCAAGCCTTC CAGGCCATGA ATTCCTTACT 420
TAGGTACCTN GGGGTTGGG GTGGGNGNCC CAGNCAAAAT TCTNGGGTTN CGTNCNCTTT 480
GGTTNNGNCC AGNTTN 496

SEQ ID NO:1496

SEQUENCE LENGTH:492

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01702

SEQUENCE DESCRIPTION:

GATCCTGTAC AGCCAGTGTG GGGATGTGAT GAGGGCCCTG GGCCAGAACC CTACCAACGC 60
CGAGGTGCTC AAGGTCTTGG GGAACCCCAA GAGTGATGAG ATGAATGTNA AGGTGCTGGA 120
CTTTGAGCAC TTTCTGCCCA TGCTGCAGAC AGTGGCCAAG AACAAGGACC AGGGCACCTA 180
TGAGATTAT GTCGAAGGAC TTCGGGTGTT TGACAAGGAA GGAAATGGCA CCGTCATGGG 240
TGCTGAAATC CGGCATGTTT TTGTACACT GGGTGAGAAG ATGACAGAGG AAGAAGTAGA 300
GATGCTGGTG GCAGGGCATG AGGACAGCAA TGGTTGTAT CAACTATGAA GAGCTCGTCC 360
GNATGGGTG TGAATGGCTG ANGGACCTTT CCCAGTNTTC CCCAGATTNC CGTTGCCTTT 420
CCNTNGTGTG AATTTTGTN ATCTAAGCCT AAAAGTTTTC CCTAAGGCTT TCTTGTCTTC 480
AAGCAACTTT CN 492

SEQ ID NO:1497

SEQUENCE LENGTH:490

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01703

SEQUENCE DESCRIPTION:

GATCCAAATA CACAGAATCA AGGGAAGGAG TTGCTTCTTC TAAGAGTGAT GCTTAATCTT 60
 TTGGGTCATG GATGAATTGA AGATTTGATT AAAGTTACAA TAAAAAGAGN CCCNTCAA 120
 GCACGTACAN NCTGTATCAC GAACGGTGCC TGGCCTACTT TTTCTTTTC TACCCACCCC 180
 ACCCCAACCC CCCCTGTCTC AGTGAAAACC TGGTTGTTAC TAAAGTGAAA CTTTAATAAG 240
 GATATTGCCT AGGGAAGATT AGTTGTTTTC CTTGTCATTC AAGTTCATTC TGGACCTCTT 300
 CCTCTGAGCT GTTAATCAGT GTTGCTAAAC AGACAGGGAA AGACAAGGGA GAGAAAAATG 360
 CTGATTCATT CTTCAGAACT TTAACCNNTT TTAACCNCTA ATTCTTCTCC TTGAGAAGCT 420
 ATTCTTTGAT TGTGAAAGCT TTGTTGTTCA GGGNAATATG GGGTAATAAA AATAGCTAAC 480
 CATTTTTAAA 490

SEQ ID NO:1498

SEQUENCE LENGTH:477

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01704

SEQUENCE DESCRIPTION:

GATCAAACCTT CCATATTTGC CTTGGGAATA ATGGACAAAG GGAAATACTC TTAATTCATG 60
 AATAAAAACT TTGCAGAAAA TTAGACAGTG TTTAATTTTC GAAAACTTCC CTCTCTAGAC 120
 AGTAGATACC ACCTACTGAT GGTTACATAT ACTAGGGAAA TTTTAAATTT AGGAAATGCT 180
 GATAGCTCAT ATTATAAATT TCTAAATCCT AGGAAGAAAC GCTTGGAGTG CTTCTGAATA 240
 TACAGAAGTT CCATTAAAGG GCAAGTTTCC CCGTAGATGT ATCAAATAC TACCAACTGT 300
 AAATTGAGGT TTAATTCCTA AATGTATTCT ACTTGTCTTA AAACAATCTG TCCNCAATA 360
 TANAACATA AAGTAATAAA TTGTTATTTT CCGCACCAAT GGGGNATCTC TAATGGTGGA 420
 AAATGGTAAT CCTATGGAAT ATTAATTTT TTTAANTAAA ANGGTNATTT TAATAAA 477

SEQ ID NO:1499

SEQUENCE LENGTH:476

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01705

SEQUENCE DESCRIPTION:

GATCCCCGAG TCTTCACAAA TNCTCACTGA AGAAAATTCC TGGACAATT CAGGGTCCTT 60
 TCATAACCTC TACTCTGAGG TGTTANTAAA AAACCTTAGT AACTTAAAAA AAATGAGCTG 120
 TACACAAATA CTGAACAATA ATGCTNCNTA TGTTAAGTAT GTANGAAAAA TATATACTTT 180
 GACATANATA AGAAACGGTG AGTTGATAAT TGGATAGAAT GGTGGATAGA GTGATAGATA 240
 TGTAATAAG CAAATATAAC AAAATGATAA TTGTACAATC TAAGTGGTTG GACTATAAAT 300
 ATGCACTTCC CACAACNTT TTATATGNTT AAACAGTTT ATAATACCAT ATTANGGGAA 360
 ACTGTTTGTC TCAAGGAAAT AGAGNTTGTG ATATGTTCTA GTNCAATGNA GGTGTAATCA 420

TGGTNAAATT AAAAGCTTTT ACTTCCTGGG CAATTAAAGG TAATCCTGGT AGGAAA 476

5 SEQ ID NO:1500
SEQUENCE LENGTH:488
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01706

10 SEQUENCE DESCRIPTION:
GATCCTGACT GCTGTCATGG CGTGCCCTCT GGAGAAGGCN CTGGATGTGA TGGTGTCCAC 60
CTTCNANAAG TACTCGGGCA AAGAGGGTGA CAAGTTCAAG NTCAACAAGT CAGAACTAAA 120
GGAGCTGCTG ACCCGGGAGC TGCCAGCTT CTTGGGGAAA AGGACAGATG AAGCTGCTTT 180
15 CCAGAAGCTG ATGAGCAACT TGGACAGCAA CAGGACAAC GAGGTGGACT TCCAAGAGTA 240
CTGTGTCTTC CTGTCCTGCA TCGCCATGNG GTNTAACGAA TTCTTTGAAG GCTTCCAGTA 300
TAAGCAGCCC AGGANGGAAA TGAAGTCTCC TCTGATGTGG TTTNGGGGGG TCTGCCAGCT 360
GGGGGCCCTT CTGNGTNGNC CANTGGGNA CTTTTTTTTT TTTCCCAACC NTGGGNTCCT 420
TTNANGANAA NGGGCTTNGA TTGCTTGAGC AAAGTTTCAA ATAAAAGNTT TNTNGGAAG 480
20 NTTTTAAA 488

SEQ ID NO:1501
SEQUENCE LENGTH:472
25 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01707

SEQUENCE DESCRIPTION:
GATCCAGAAG CTGATGGATG TGGGTCTGAT TGCAATTCGG TGATGACTTG TTCATACCCC 60
30 CTTCCCTTCG CCTCATGTG GAAAGAGGAG CTGGGACCGC GGCAGCAGC ACGGAGCGGA 120
AGGGAGAGCA GGGGAGAGAA GGCTCATNT CTCTATATT ATACATAACC CCGGGGAAGA 180
CACAGAGACT CGTACCTGCG CTGTTTGTGC CGCCGCTGCC TCTGGGCCCT CCCAGCACAC 240
GCATGGTCTC TTCACCGCTG CCTCGAGTT CCATGTCTCT TCCCCCTGCC CCTAGTTGCT 300
35 GTCTCGGCTG CTCTCCATA GTTGGTTTTT TTTTNNATT GGGGCAGTGG GCATGTTAAT 360
GGGGGAGGGG AGGGGGTTCT TCCAGCCTNA GGTCCCAGTT GGTCTNACGT NGTTTAATTC 420
TTGGGTCCCC TTTTCCAAT TAAAACAAGC CANTNGGGG GTGGGTNTA AA 472

40 SEQ ID NO:1502
SEQUENCE LENGTH:469
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01708

45 SEQUENCE DESCRIPTION:
GATCGCAAAT TGCTNGAGCT GTTGTGGAAT AAATACTGGG TGAATACGTT GAGTTCCTCT 60
AGCTTGCTTA CTAATGCAGA CTATACCACT GGTGAGGTCT TTGATTGTC TGAAGTTA 120
GAGCAGTCAG AAGCCAGCT GGGACGAGG AGTTTCATGT TGGGTTTGA AACGCATGAC 180
CGAAAATCAG AAGACAACT TGCCAAAGCT ACAAGAGACA GCTGTAAAAC TACCATAGAA 240
50 GCTATCCATG GATTGATGTC TCAGGTTAAT TAAGGATAAA CTGTTTAATC AAATTAACAT 300
CTCTCCACA GTCTCTGAGA AGGGCTNTAC CTGAAAGACA GTATNGGGA AAATATTCAA 360

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EP 0 679 716 A1

GGTAACACTT TTAANCCAG TTNCCNAAAA TCTGATTAGG ANGNTNANGG TTCTCTGAAG 420
TGGTCCTAAA TATTANTATC CCTGTAATAA ANGCTCTTA AANTGGAAA 469

5 SEQ ID NO:1503
SEQUENCE LENGTH:466
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01709

10 SEQUENCE DESCRIPTION:
GATCTGCAGT GGCTGTTTGA CCAGACCACA AAGTTCACAT CTCCTGAGCT TAGTGTCCTG 60
GGCTGTCCAC CTCCCAGCCA TACTTGACTG TCCCCAACT CTCCTGCAG CCACATGTTT 120
CCCATGACCT GTGGGCTCTG CAGATGGACC TCTCTCGCT AGAGATGCCC TTCTCCCAA 180
15 TGGCTTCCCT CCTGGAAGGC CCAGCCTGAG TCCTCGTCTC CTTTCCAGTG CTTCTGCCAG 240
AAGCATCCCC ATGATGTTGT GACCGCACAG CACTTTGTGT CTTGCTTGA GCACTTGCCA 300
CTCTGGCTGG TGCTGCTGCC ACTGATTGTG TACTGTCTTG CTGCCCTTTC TAGACTGTGA 360
GCTCCTCGTG GGCAGGGACC GCCTGTGTTT TCTGTATTTT CCACGGAGCC TAAGNACAGT 420
GCCTTGCACT TGATAAGGTG CTTAATAAAT GTCTGNTCAA CTGAAA 466

20 SEQ ID NO:1504
SEQUENCE LENGTH:465
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01710

25 SEQUENCE DESCRIPTION:
GATCACTGTG TTCAGTGTG TTGGAATGGA TTCAGACTGG CTAATGGGGG AAAGGGGAAA 60
CCAGAAGGGG AAGGTGCCAA TTACCTACTT AGAACTGCTC AATTAAGTAG GTGGACTATG 120
30 GAAAGGTTGC CCATCATGAC TTTGTATTTA TATACAATTA ACTCTAAATA AAGCAGGTTA 180
AGTATCTTCC ATGTTAATGT GTTAAGAGAC TGAATAATACC AGCCATCAGA AACTGGCCTT 240
TCTGCCAATA AAGTTGCATG GTAAATATTT CATTACAGAA TTTATGTTAG AGCTTTCATG 300
CCAAGAATGT TTTCTTACAA AATTCTCTTT TTATTGAGGT TTCACTAATA AGCAGCTTCT 360
35 ACTTTTGAGC CTCAACTTAA AGCAGANCTG TTTTCTACTG GGATTTTTC TTAACAGCAA 420
GCCTTTTCTT TTTATGTAAA ATTAAATCTA TTGTGGAATT TGAAA 465

40 SEQ ID NO:1505
SEQUENCE LENGTH:462
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01711

45 SEQUENCE DESCRIPTION:
GATCTTGTCT TTAACCATG ATAGTCCTTT CAGTATAATG TCTTAGATTA AAGACGTTGC 60
CTTTAATATC TGTTGGGAAG GAAATGTCCA GACTTTTCAA ATCTCTTATT ATATGTTTCC 120
TTTTNTTGT TACATAGGGA ACAATGTTTA TAGTCGTGTG TACAGTGGGG GTCTACANCN 180
NGAAGTGAT ATTTTCAAAC AATTTTAA NGATTTAACA ATTTTGTAA ATCATTITCA 240
50 GGCTTCTGCA GCTGTAGATT CTCAGTGTGA ATCCCTTGCT TGCTCATGCA TAAGTGATTT 300
TGCAATACCA NATATACAGG TTAGTATTT TTGCCTGTGA GTNGATTGTT TCACATGNGT 360

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AACGTNTTGG GTGAGATGTT ANATGGTTGG NCGAGGTACT GTGGANGTGA ATGTGGGNAG 420
 TAATTTTAAAN NCATATGNAA TTGGTCACCA GGGCCNAATT TN 462

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SEQ ID NO:1506

SEQUENCE LENGTH:459

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01713

SEQUENCE DESCRIPTION:

15

GATCCCAAGC AGGCTCACAA ATTTAAATGA GGGCTTTGTG TGCAGAAAAGA GGAATAAGTA 60
 CAGATTATTT TCCTACCACT AGATTTTGG GGAGAGTCAC CATGGAATGT TGACAATTAC 120
 TTAAATATT TTAAGTCCC TTGCTGAATT CCTGTCCTGT CCCTGAGGAA TCAGATGGTC 180
 ATACAGCCAT AGGCACCCAC CCGAAATTC CCTAGGAGTT GGAGTAATGC TAGAATTGAA 240
 GACCTTCTGA GTAAAGGGCT TCTCTGCCTT CTCAGAGGCA GGAGAATTG CACTGGTTGT 300
 GTTAAATGTA TAAAAGCTA TATGTTCACT AGTTTACTCA TTTCCAATGT GTAGATGAAT 360
 AAAATGTAGT GTACAAATTA TTTGAAAATC CCAGAAGGGA AGGTACTTTT CAAANACAGT 420
 ATTTTTTTTA ACAAATAAAC TTACGNTTTT TACAGCAAA 459

20

SEQ ID NO:1507

SEQUENCE LENGTH:454

25

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01714

SEQUENCE DESCRIPTION:

30

GATCTCCTGT CCATCAGCCA GGACAGTCAG CTCTCTCCTT TNAGGGCCAA TCCCAGCCC 60
 TTTTNTNGAG CCAGGCCTCT CTCACCTCTC CTACTCACTT AAAGCCCGCC TGACAGAAAC 120
 CACGGCCACA TTTGGTTCTA AGAAACCCTC TGTCATTGCG TCCCACATTC TGATGAGCAA 180
 CCGCTTCCCT ATTTATTNAT TTATTTGITT GTTTGTTTTA TTCATTGGTC TAATTTATTC 240
 AAAGGGGGCA AGAAGTAGCA GTGTCTGTAA AAGAGCCTAG TTTTAAATAG CTATGGAATC 300
 AATTCAATTT GGAAGTGGT GCTCTCTTA AATCAAGTCC TTTANTTAAC ACTGAAAATA 360
 TATAAGCTCA GATTATTTTA ANTGGGNATA TTTATAANTG NGCAAATATC ATACTGTTCA 420
 NTGGGTTCTG GAATAAACTT CACTGGAGGG NAAA 454

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SEQ ID NO:1508

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SEQUENCE LENGTH:453

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01715

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SEQUENCE DESCRIPTION:

50

GATCGAGCAG TGTGACTACC CCCCACTCCC CGGGGAGCAC TACTCCGAGA AGTTACGAGA 60
 ACTGGTCAGC ATGTGCATCT GCCCTGACCC CCACCAGAGA CCTGACATCG GATACGTGCA 120
 CCAGGTGGCC AAGCAGATGC ACATNTGGAT GTCCAGCACC TGAGCGTGA TGCACCGTGC 180
 CTTATCAAAG CCAGCACCACT TTTGCCTTAC TTGAGTCGTC TTCTCTTCGA GTGGCCACCT 240
 GGTAGCCTAG AACAGCTAAG ACCACAGGGT TCAGCAGGTT CCCCCAAGG CTGCCCAGNC 300
 TTACAGCAGA TGCTGAAGGA GAGCAGCTGA GGGAGNGGN GCTGGCCACA TGCTACTGNT 360

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EP 0 679 716 A1

GGGTCAGNTT CCAAAGTCCT TTNNTTANCA CTGTTGTGGA CAATNTNANN TNGGGTCAAN 420
TNAAGGGCAG GTNGGTTNAA GNGGNGCCNN GGN 453

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SEQ ID NO:1509
SEQUENCE LENGTH:450
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS01718

SEQUENCE DESCRIPTION:

15

GATCCTGGGG AAGGTGGGA ACATGCTTGC AGTATCTNTC CCTGNTGTN TGCTCACATA 60
AGCATTCCGT CCATCTGAGC TCATCGTGCT ACTGGTATGT GTATGTNCAG TTACACAGTT 120
TTNTGTATCA TAGATTCTAG TGTGTTTATA CAAGGNGACA TCTGTGGTTT CCCCACCGT 180
TCCAAAAGGC TATTTCAAAG GAACCAGCCA ACGTATGAGA AATGANTGTA AACTGTGGA 240
CATTGACTTC CCGCATAAGG CAGGGTGACC CCCTGAACTC CAGATGTNTG CACAGTATCT 300
NATGTGTTGT TTTCCGTTGT GACGAATGTG NATTGGAACA TTTGGGGGAG CACCCAGAGG 360
GATTNTNAG TGGGAAGCAT TACACTTTCG TAAATCANGT ATTNNTTCC TGNTTAAACC 420
AACCTANTTA ANTNTTTANC CTTGGCAAA 450

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SEQ ID NO:1510
SEQUENCE LENGTH:449
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

25

CLONE:HUMGS01719

SEQUENCE DESCRIPTION:

30

GATCCATGGA TGAGTGGGG AGTGGAAAAT GGCACAATAT CAAGTGTGAG ANAGGNGATA 60
NACTTCGACT CTNCTGCCTT CAACTGAGAN CAGTTGACCG CAAGCTGAAA CTGGTGTGTG 120
GNAGTCACAG CTTATCAAG GTCATCAAGG CCAAGAAAAA CAAGGAAGGA CCAATGAATG 180
TTAATTGAAA TATGAAAGCT GAAATGCAAC AAACAACTTC CGCTTAAAC AATTAAGTTG 240
TTAATAACTG TGATTTTGT AATTTAGTA ATTCATTAA ATGATGTTT AGTAGATATA 300
TTCTAGCATA TTANGAGCTT TTATAACTGA GTTATAGATT AGTTTGCTTT CTGGAATAAA 360
ATTTTCTTCT TATACTCTTC CTTTTTTTTA GATATNACAT TTTGCTTTTA TGNCAATCAC 420
GGGGGCAAAA ANTAATAATAT CTTTTTTTN 449

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SEQ ID NO:1511
SEQUENCE LENGTH:464
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS01720

SEQUENCE DESCRIPTION:

45

GATCAGAATC ATGGTCTCCC GCAGTGAAGT GGACATGTTG AAAATNAGGT CTGAATTCAA 60
GAGAAAGTAC GGCAAGTCCC TGTACTATTA TATCCAGCAA GACACTAAGG GCGACTACCA 120
GAAAGCGCTG CTGTACCTGT GTGGTGGAGA TGAAGTGAAG CCGACACGGC CTGAGCGTCC 180
AGAAATGGTG CTCACCATGC TTCCAGCTAA CAGGTCTAGA AAACCACTT GCGAATAACA 240
GTCCCCGTGG CCATCCCTGT NAGGGTGACG TTAGCATTAC CCCCACCTC ATTTAGTTG 300
CCTAAGCATT NCCTGGCCTT CCTGTCTAGT CTCTCCTGTA AGCCAAAGAA ATGANCATTN 360

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CAAGGGAGTT TGGAAGTNAAGTCTATGANT GTGAAACAAC TTTNNCCTC CTGTNGTNCT 420
GTGTTAATAA ANCAGGTGNA TTAAACTGGN TTTNGTACTT TAAA 464

5 SEQ ID NO:1512
SEQUENCE LENGTH:445
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01721
10 SEQUENCE DESCRIPTION:
GATCTTGCCA TGGAAGATAC TAGCCCAGCC TAGCAGAAAA GTGCAATATG TATAGCATAC 60
TTTGACATTT TAAACATGAT AGTCCATAAC CATTTTGAAA TGCTGGGCAA ACTACATGAA 120
GTTATTTTATA ATTAATTCAC AGCTAATCAG GCATTTTGAA AGCTTAATTG GATTCAAAAA 180
15 CCATAATGTT GGAATTTGGT AAAATTTTAA TGTGATTTT TACTGTGAAA AGGTTTTTAT 240
AAGATATACA CACCCTAGTT TAATGTTGTG TCTGGTGTG GATTACAGA TTTACTACAG 300
GTATTCTGAA CCAGGAACAC ANTCAGGTTT TCAGGCCAGT TTGAATACTG GCTGGCCTTA 360
AATTCTAATT ATNNGGAGTA GGGACATCAT ACCTAAATNT TTATGTCAGT GGGGNCTGTA 420
CTTGCTGTG GGANCTTAGC AAATN 445
20

SEQ ID NO:1513
SEQUENCE LENGTH:435
SEQUENCE TYPE:nucleic acid
25 TOPOLOGY:linear
CLONE:HUMGS01722
SEQUENCE DESCRIPTION:
GATCAATCGG ATTGAGAAGA ACATCCTGAG CTCAGCGGAC TACGTGGAAC GTGGGCAGGA 60
GCACGTCAAG ACGGCCCTGG AGAACCAGAA GAAGGCGAGG AAGAAGAAAG TCTTGATTGC 120
30 CATCTGTGTG TCCATACCG TCGTCCTCCT AGCAGTCATC ATTGGCGTCA CAGTGGTTGG 180
ATAATGTCGC ACATTGTTGG CACTAGGAGC ACCAGGAACC CAGGGCCTGG CCTTCTCTCC 240
CAGCAGCCTG GGGGCAGGGC AGAGCCTCCA GTCGGACCCC TTCCTCACAC TGGCCCCTAT 300
GCAGANGTN AGACAGTTCT TCTGGGGTTG GNAGCTGCTC ATTCATGATG GCCTNCTCCT 360
35 TNAGGCCTCA ATGCCTGGGG GGANGGCTGC ACTGTCCTAT TTGGNCGGGA CANACGGTTT 420
TNTAAAAATT TAAAA 435

SEQ ID NO:1514
SEQUENCE LENGTH:434
40 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01724
SEQUENCE DESCRIPTION:
GATCTAACCT AGACTAAAAT TGGGAACCTA TTTGCAATTT TTGACCCNGN CCACTAACTA 60
GTGATTCTNC TCCAAAATTG AGAAAGACAG CACCCATTGA AGCAGATATG TGTGTGAAAG 120
TATATTTTTC AATTCCAGAT TTTTAATTTT AAGGCTCCAG GAAAGAAAGG AGAGTAGAAC 180
ATTTTCTCTC ATTTTATCAA ATCCTCTCTT GCCCTCCCTC AATTCCCCTG TAACATTCCT 240
45 GAAGCTGTTT CCACTCCAG ATGGTTTTAT CAATAGCCTA GAGGTAAAGA ACTGTCTTTT 300
TCTCTGATTC TTTAATAAAT TATCTTTATA GGAATATGCA CAAGTTTTTT TTACACTCAG 360
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TGTTAAAAGT ATTTATTAAT NGGGAAGTCA ACTTAATGTT TTGAAATAAA NTATATGNCT 420
CTGGTTAATG CAAA 434

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SEQ ID NO:1515
SEQUENCE LENGTH:423
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01726

SEQUENCE DESCRIPTION:

15

GATCCAGTGA TTCANTCACT TAAATNAAGT CTTTGGTCA GAAATNACCT TTTTGACACA 60
AGCCTACTGA ATGCTGTGTA TATATTTATA TATAAATATA TCTATTGAG TGAAACCTTG 120
TGAACTCTTT AATTAGAGTT TNCTTGATA GTGGCAGAGA TGTCTATTTC TGCATTCAAA 180
AGTGTAATGA TGTACTTATT CATGCTAAAC TTTTATAAA AGTTTAGTTG TAAACTTAAC 240
CCTTTTATAC AAAATAAATC ANGTGTGTTT ATTGAATGGT GATTGCCTGC TTTATTTCAG 300
AGGACCAGTG CTTTGATTTT GATTATGCTA TGTNATAACT GACCCNAAAT AAATNCAAGT 360
NCAAATTTAT GTNGNCTGTA TAAGGTTTGT AATAANCCAT GNCTGAGGNC AAAAAAGGGN 420
AAA 423

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SEQ ID NO:1516
SEQUENCE LENGTH:419
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01727

SEQUENCE DESCRIPTION:

30

GATCTGTAAT CTCCACTGCT TGGATGTCTG CCCTCTACCC CAGAGGAATT TACAGAAACT 60
TGCCCTGTGC CTGTGTCCC CATGCTAGGG GCGGAGGGGT CTTTCCTTC TTCTTCCTA 120
CCTACCCCTT TTCTCTGGC CAGGGGCCTC GTATCCTACC TTTCTTGTG CCCTGGGCTG 180
GGTGACAGA GGATTGCCCC TTCTCTTTTC AGAGCTGGCC CTCGATGCCA AATTAGCATT 240
TAGTATTTTG CACAAAGTCT AAGGGACCAT GGCTGCCTGC CTTGGGGAGG AACCATAGCT 300
CCNTCTGGGC CGCTTCTGGC CTCTGGAGC CATGGGCCAA AGGCAAGGGG ATGGGCAGAG 360
GTCTGTGTTT GGTCTGCCCC AGTCCNCAT CATTAACTC AGCCTGACTG CTGCCTAAA 419

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SEQ ID NO:1517
SEQUENCE LENGTH:419
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS01728

SEQUENCE DESCRIPTION:

45

GATCCTCAGT AGANCAGTCC AGAAGCCTGA NAGACAGTGG CCCCTTGATA ATCTGGGTCT 60
CACGGGNCCA GCTAGGGGTC CAGGTTTCAN TCAGTAAATA AGAGTGGTCC ACGTCCTAAA 120
GACACCTCTC CTNNACAAAG ACTTGTGATG CTCTGGGGNT TCTNTGGCCA AGCCCCACCC 180
TTTCCTGGTC ATGGTACCCG TACAGCGTTG ATGGCCACAG CTCGAAGGGG GGCTTTCGTG 240
TCCCCTGTG CGGTCAAGTGT TTTCAGTACC ACCTCTCTCC CGTGCCCACT TGGCTATTTA 300
CTTATTTATT TATTGTGTGC CAGTNATGGT GGGTGGGGGC TGGGCCTTC CCGCCACCTN 360
CANCCTGTG GTGACCTGTC CTTCCGTACT TAATAAAGTG CGCGTGNGGA GTTGTTAAA 419

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SEQ ID NO:1518

SEQUENCE LENGTH:418

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01729

SEQUENCE DESCRIPTION:

GATCTNAGCC CTCGGTTCC TGGGCAGAGA GAAAGGCTAC AGGTTCAATT NCCTGACGAC 60
AGCAGTCACA AACAGCGCTC GCNTTATGGA GGCCATNAGT GAGGTGAAAG CCTGATGTTT 120
TTCCCGGCCA NTNTTGACAT CTTCCCTGAA CACATTCTC AGTGAGATGC AGGCATCTGG 180
CACCCAGCTG CTATAACCA GTGTCCACCA ACTACCTGCT AAGAGCCGGG AGCATGGAAC 240
GTGTTGGGAT TTAGAGAACA TTATCTGAGA AAAGAGITCA CTTCTGCTC CCAGGATATT 300
TCTCTTTTCT GTTATGAAG TACAACCCAT GCTGCTAAGA TGCGAGCAGG AAGAGGCATC 360
CTTTGCTAAA TCCTGTTTGA ATGTCATTGT AAATAAAGCC TCTGCTCTCA GATGTAAA 418

SEQ ID NO:1519

SEQUENCE LENGTH:404

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01730

SEQUENCE DESCRIPTION:

GATCCAATTT ACAGAAATCA GAGTTAGCTA CAGCTAGGAC TCGTTGGTT GGGGTTTTTT 60
AGTTTGTCTT TCTAAAGTCA TGTGGACCTT AATTAAATTA CAAAAGTCTA CCCTGGTGGT 120
CATAAATAG GCAGGCCTAT GAAGAAAGGC CTTTACTCT TCCATCTCGT CCCAGCCCCG 180
AGTTGACCCA CGTTGCTGCT CCTCACACCA TGGTGATGCA GGTCTCGTAG TGTGGGCACA 240
GGCCTGGCTA CCTCATCTTT TTAGTGCCTC TCTCCTCTC CACAGGATGG GGTCCACAG 300
CTGCAGCAGC TGGCCCGGTA GTTGAGCATG TGTGGTTATC CTGTAGAGCT TTTCCCAAGA 360
AGGGTGTTTG AACTTAGAGT CTTAATAAAA TCTTACCAAA TAAA 404

SEQ ID NO:1520

SEQUENCE LENGTH:402

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01731

SEQUENCE DESCRIPTION:

GATCTACAGA TACGTGATAT TNTGGTATAA CTAGAATCTT GATTTCTTTC ATAAAGTTCT 60
GCCATGTTCT ATTTCTTTCC TTAATGTTTT TTTCTTCCT ACTGTTTTAT CCTCCCTTTG 120
CTTTGGAAGG ATATTNCTGC ATATCGAGCT AAAGGAAAGC CTGATGCAGC AAAAAAGGGA 180
GTTGTCAAGG CTGAAAAAAG CAAGAAAAAG AAGGAAGAGG AGGAAGATGA GGAAGATGAA 240
GAGGATGAGG AGGAGGAGGA AGATGAAGAA GATGAAGATG AAGAAGAAGA TGATGATGAT 300
GAATAAGTTG GTTCTAGCGC AGTTCTTTTT NNCTTGCTA TAAAGCATTT AACCCCTG 360
TACACAATC ACTCCTTTTA NNGAAAAAAA TTGAAATNTA AA 402

SEQ ID NO:1521

SEQUENCE LENGTH:407

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01732

SEQUENCE DESCRIPTION:

GATCTCAGCT GAACAAATTA GATGTTTCAG TTGCTCTTGG GTCAACTGGC TTACAGATTT 60
 ACATGTGCAC ACACACACAA ATTTCTTATC ACATTTTCGC CTTCTTCACT TGACCTAACT 120
 GATTATGCGA AATACCCAAG ATTCATGCTA CTGTACCACA GATTGTGTTT CACAGCAATA 180
 AATCTTCAGT TCTTTGTTTA TGATTCCACT TAACAAAAGG CCTGCAGAAG TGATTATTA 240
 TTTGGGTATT TGGAGATAAT ACATTTGATG GTTTTTTGGG AAACCTTTT CACTCCATAC 300
 TCAGATATGC TTCATTGTCA AATGCATATT TAGGNTAGGT TAATNGAATT GTAATGTTTA 360
 ACCTGCTGCT TTTTTTTTAA ATAAAAATTT GACTGAAAAT GGTTAAA 407

SEQ ID NO:1522

SEQUENCE LENGTH:397

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01733

SEQUENCE DESCRIPTION:

GATCTAGTAG CCACGCTAAA AAACAAGTAA AATTAATTTT AATATATTTA ACTCAATACA 60
 TTGGAGATAT TATTTAGAA CGATATTTT CATCTTATG AAATAAGTC TGTCTGGTTT 120
 GCATATCTCA GTTGAGACAC TAAAGTTTAA CTGATAATAC TTAATCCATN NATTAGATTT 180
 CATAAAATCT AAATTTGCAA AGTAAATTTA CATACCCATG TNGGTCTAAA TGTGCTTAAA 240
 AGTTTTCCAA TAACTGAAAT GAGTATCAGT TTTAAATTTA AAAATTTGTT ACTTGGTTAC 300
 TCCATATTTT AGGTATTAGT GGCTACCATA TTGGTCAGAG CAGATTCATA GGGATGATTT 360
 CCCAGGTTTG AAGTGTGTGT ATATTGCTGG TATTATN 397

SEQ ID NO:1523

SEQUENCE LENGTH:395

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01734

SEQUENCE DESCRIPTION:

GATCTGTACG AAATGTGAAA TTTTTAGGGA CATCTCCATG CTGTCACCTG TNATTTGCCC 60
 TCTNATGTAT TTNGGTCATA TTGCCAACTG GAAAGTCAAA ATTCCTAAC AACTTTAAGT 120
 AAGTCCTTTN AAGACTNAGT GCTGTTTTNA ATCCAGTTTA GAAAGTAACT TAATTTTAAT 180
 ACCGCTACTA AAAATNCGAA AATTTCTCCT TTAATCACAT TCAATATGGT TAAANGAACA 240
 AACTAATTG ACATTGCGTG GGCTTTTCCT CCCTTTGTTT AAANANGTCA TTTTGTGAG 300
 CAAGNGGTTG TATAGTATTA TCTACTNNCT TGAGGCTGTT AAATTTNCNA TTCCAGNGGT 360
 TTTGTAAATG TATCCCGGGG CCNTGNTGCA TTGGN 395

SEQ ID NO:1524

SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01735

SEQUENCE DESCRIPTION:

5 GATCTCAATG ACCTGGCGAA GACTGGA AAA TACA ACTCCC ATCACCAGCA GAGTTGCTAG 60
 GCTGCTGCTG TATGGGTACA GAGAAGGGTT TGACAAAATT GACCTGACTG TGAAGAAGCT 120
 TCCAGCAGTT TACACAGGAC TGTTTTATAA ACTCTATCAT AAGGAACTGC CAGAGAATTA 180
 TAAAACTATG AAAGGAATTG ATTAAATTCA CATTATATG TTTAGAAACA TGTAAGCTAA 240
 CGAATGACAT AAGAAATAGT GGACATTTTG GATTGATTAA ACATCTGACT GTGATTTTCT 300
 AATGTATATG ATTTCCATGA AGAAATTTTG TTTCTAAACA TGCACATTTT AAAAGCCTCT 360
 10 TTTCGAATAA AGCAAATGCG TGA AAAANGAA A 391

SEQ ID NO:1525

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01736

SEQUENCE DESCRIPTION:

20 GATCCGGCGC CACAAGACCA CCATCTTCAC GGACGCCAAG GAGTCCAGCA CGGTGTTCCA 60
 ACTGAAGCGC ATCGTCGAGG GCATCCTCAA GCGGCCTCCT GACGAGCAGC GGCTGTACAA 120
 GGATGACCAA CTCTTGATG ATGGCAAGAC ACTGGGCGAG TNTGGCTTCA CCAGTCAAAC 180
 AGCACGGCCA CAGGCCAGC CACAGTGGGG CTGGCCTTCC GGGCAGATGA CACCTTTGAG 240
 GCCCTGTGCA TCGAGCCGTT TTCCAGCCCG CCAGAGCTGC CCGATGTGAT GAAGCNCCAG 300
 GACTCGGGAA GCAGTGCCAA TGAACAAGCC GTGCAGTGAG ACCCCCAAGA GGCCCATTTT 360
 25 CCCCAATAAA AGAGATTGG GAGTCAAA 388

SEQ ID NO:1526

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS01737

SEQUENCE DESCRIPTION:

35 GATCTTATTT CTCTACTCA ATTGTATATT TATACCCAT AATCAACTTC TGTCTTGCT 60
 CTCTCCGTGC TACCTTCTG GCCTTTGGTA ATCGCCAATC AATCTACTCT CTATCTTCAT 120
 GAGACCAGCG TATTTAGCT CCCACATATG AATGAAAACA TATAATATTT GTCITTCTGT 180
 GCTTGACTTA TTTTACTTAA CATAATGACC TCCAATTCCA TCCATCTGT GGCAGTACA 240
 GTATTTTATT CATTTTGTG TGAATTATAT TTCGTTGTGA ATATACATTA CATTTTCTTT 300
 ATCCATTCAT CACTGATGTG CACTTAGGTT GATTCCATAT TTGGGCTATT GTGAATAGTG 360
 40 TGTTAATAAA CATGAGAGTG CAGTTAAA 388

SEQ ID NO:1527

SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS01738

SEQUENCE DESCRIPTION:

50 GATCTTCTCTG GTCAGCGCTC TCTCTAGCAT ACTCTTCCTC TATTGGCTC ACAAACAGGC 60
 ACCAGAGAAG CAAATGGCAC CTTGAACTTA AGCCTACTAC AGACTGTTAG AGGTGATACT 120

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EP 0 679 716 A1

5 ATGACCATGA GTAGCATCAG CCAGAACATG AGAGGGAGAA CTAAGTCAAG ACAATACTCA 180
GCAGAGAGCA TCCCGTGTGG ATATGAGGCT GGTGTAGAGG CGGAGAGGAG CCAAGAAACT 240
AAAGGTGAAA AATACACTGG AACTCTGGGG CAAGAGATGT CTATGGTAGC TGAGCCAAAC 300
ACGTAGGATT TCCGTTTAA GGTTCACATG GAAAAGGTTA TAGCTTTGCC TTGAGATTGG 360
CCTCATTAAA ATCAGNGACT GTAAA 385

10 SEQ ID NO:1528
SEQUENCE LENGTH:377
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01739
SEQUENCE DESCRIPTION:
15 GATCCGTAAT CAGAACGTCC AGGAGAGACG CATGGCCCGA AGTCAAAGTG CTGGAATTTT 60
CCAAAACAGC CTGTTCTCTC CTCTCTCCTC CCCAGAGCAC CCCCTGCCAT CAGGGGGGTT 120
GAAATCCCTC TCCCCCAGGA GCCCTGCTGC TTTGCTTGGT GGTAGGGCAG GAGAGCAAAC 180
AAACAGTCAT GGTCTAAAAC CCACATAGCA CTTTGCTCTT AGTTACATGT AAAATTTTAG 240
ATTTCTAAAA CAGGTGGGCA ATCATTTTGA ATACTGTCT GTGACCCTGA CTGCTAGTTC 300
20 TGAGGACACT GGTGGCTGTG CTATNGTGTG GCCATGCTCC NTTGTCCCCG TNCCTGTTGG 360
CTGCTTCTGT TTAGGTN 377

25 SEQ ID NO:1529
SEQUENCE LENGTH:167
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01740
SEQUENCE DESCRIPTION:
30 GATCCAAGGC CTGTGGTAAA CGGGAGANCT TGTNTTTTTC AAGTGGAAAA AAACCCAAGA 60
GTTTGTNCAG ACATCCTGTC TTCCAGAGA AGGTGGACAC TCTTGGNCTC ATTGTAAAGT 120
GCCTGCTGNA TCAATAAAGC TCTTGGCTTA TTAGTCTATA AAACAAA 167

35 SEQ ID NO:1530
SEQUENCE LENGTH:372
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01741
40 SEQUENCE DESCRIPTION:
GATCCACACG TTCCGGGACT ACCTGCACTA CCACATCAAG TGCTCTAAGG CCTATATTCA 60
CACACGTATG CGGGCGAAAA CGTCTGANTT CCTCAAGGTG CTGAACCGCG CACGACCAGA 120
TGCCGAGAAA AAAGAAATGA AAACAATCAC GGGGAAGACG TTTTCATCCC GCTAATCTTG 180
45 GGAATAAGAG GAGGAAGCGG CTGGCAACTG AAGGCTGGAA CACTTGCTAC TGGATAATCG 240
TAGCTTTTAA TGTTGCGCCT CTTCAAGGTTT TTAAGGGATT CTCCGTTTTG GTTCCATTTT 300
GTACACGTTT GGAAATAAT CTGCAGAAAC GAGCTGTGCT TGCAAAGACT TTCATAGTTC 360
CCAAGANTTA AA 372

50 SEQ ID NO:1531

55

SEQUENCE LENGTH:372

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01742

SEQUENCE DESCRIPTION:

GATCCACTGT TGGGGCCTCG ACGAGTTCCT GTCCTGGGAA AGGAGTACAC CGAGAAGACC 60
 CCCATTTCTG AGCATGCTGT TTTCAATGTG GACCTCATGA GCAAGAAAAT TCATCTGACT 120
 GAGAATGGGA TAAGGGTGGG TATTGGCGAT ACAATAATCT ATCTGGTTCA TTAAACTCAT 180
 GCACATTGGA GATTATCCT GGTTCCTTAG GAATACTACT ACTCTGATTG TGTCTACTGA 240
 TTGGCTATCA GAACCTTAGG CTGGACCTAA ATAGATTGAT TTCATTTCTA ACCATCCAAT 300
 TCTGCATGTA TTCATAATTC TATCAAGTCA TCTTTGATTC CTGGACCTAA TAAATTTTTT 360
 TTCCCTTTCA AA 372

SEQ ID NO:1532

SEQUENCE LENGTH:368

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01745

SEQUENCE DESCRIPTION:

GATCCCAGTC ACAATTATCA CCGGGTATTT AGGTGCTGGG AAGACAACAC TTCTGAACTA 60
 TATTTTGACA GAGCAACATA GTAAAAGAGT AGCGGTCATT TTAATGAAT CTGGGGAAGG 120
 AAGTCCGCTG GAGAAATCCT TAGCTGTCAG CCAAGGTGGA GAGCTCTATG AAGAGTGGCT 180
 GGAACCTAGA AACGGTTGCC TCTNCTGTTT AGTGAAGTGA GGAATGTGTT TACTGTGTAC 240
 ATGGTTTACT AGAAATGTTT ATTGATTATA TTTCCAGCTT TAATTTTCTT GAGTAATTTA 300
 ACTGAATTTA CACAGTTTGC TTCATTGTAT TTTCAAACAA ATAGAAAATA AACTTATTAG 360
 GAAGCAAA 368

SEQ ID NO:1533

SEQUENCE LENGTH:364

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01746

SEQUENCE DESCRIPTION:

GATCGTCCCC GTATGATGAT TGTNAGAAGA CAGGACTAAG TAGCAGAGAA TAGCTAAGAG 60
 ATAAATTGGG CTGGGGAAC TTGTCAGAAA GCACTGAACA ATTAAGAAAT TTTCCAAGAA 120
 AATGTGCAGT ATTCTCTGCT ACTTCTGAAT CTGTTTGTG TTCCTAATCT ATCACAATTG 180
 CCACCCATCG GGTTTTGGGT GTGTGTTTTC ATAGCGTGGT TACTTTCTAT AATGCTGTAC 240
 CCAGATTCTA AGAACCTGGA GAAGGATTAG CAGTTCTTAG TAAGTTTACT GTGTATAGGA 300
 ACGGTTTGTG TTTTATTACA GCTATTCATC TTTTCTACAT TAAAAATATT TTTCTCTAAA 360
 GAAA 364

SEQ ID NO:1534

SEQUENCE LENGTH:362

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS01747

SEQUENCE DESCRIPTION:

5 GATCTGTGCC ATAAATTTT AGTGAATAA GACTTCTTCA ATACATCTTC CAATAAGGGG 60
 TGCTTCTTTG TGACAGTATT TTTATTTCTG ACATTCATTT TATTTGGGTA CATAGTGTGG 120
 TTGTTGATAC CTTGCAATAG TATTGCTTCT GAAAGTAATA AAAAATTTTA GGAGAATTTG 180
 AGAAGTTTAC AGAATTACTT ATTCATTGTT TTCTTAGTAA GTCAGTTTAA TGTTTATTTT 240
 TCTCATTATT TCATCACTGC AATAAAGAAT AAGGGTGTTC GAGCTCACCT CCATGCAAAG 300
 10 ACTTCAGTTT TAAACATTA TTTGCCTAAA ATTAGCATTG TGATGCTTTC TGAAAGAAAT 360
 AN

SEQ ID NO:1535

SEQUENCE LENGTH:361

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01748

SEQUENCE DESCRIPTION:

20 GATCCACCTC TCCTGTGCTA AGATTAAGAN GACCAACGTC CCCGANTTCT TTNATTGCCA 60
 GAAATGCAAG GAACTGAGGC CAGAGGCCNN GCGGTAGGG GGGCCTCCCA AATCTGGAGA 120
 GCCTGATGG CACCAACTTT AGCCTGGAAC TTCCAAATNA CAACATGATT TGGGAAGTGA 180
 GCCTCAGGGT CCTCAGCCTA TCCCTGGAG CTTGGATACT GTCTGCACTT CAAGGCAGGA 240
 ATTCTCAAGG GAGACTTGTT TGAAATNAG TGTCTCACTT TCCCACCCTA TCCTTCCTCC 300
 25 CCACTCTGTG GACTTGAAT TGAATCCATT ACGGTTGGGG ATGGGAGGCT GTCTGTGTCC 360
 N

SEQ ID NO:1536

SEQUENCE LENGTH:360

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01749

SEQUENCE DESCRIPTION:

35 GATCGATTCT CTCTATGAAG GAATCGACTT CTATACNTCC ATTACCNGTG CCCGATTNNA 60
 AGAACTGAAT GCTGACCTGT TCCGTGGCAC CCTGGACCCA GTAGAGAAAG CCCTTCGAGA 120
 TGCCAAACTA GACAAGTCAC AGATTAATGA TATTNTCTG GTTGGTGGTT CTACTCGTAT 180
 CCCCAAGATT CAGANGCTTC TCCANGACTT CTTCAATGGA AAAGAACTGA ATANGAGCAT 240
 CAACCTGAT GAAGCTGTTG CTTATGGTGC AGCTGTCCAG GCAGCCATCT TNNNTGGAGA 300
 40 CAAGTNTNNG AATGTTCAAG ATTNCTGGC TCTTAGGNTG TCACTACTCT TTTCCCTTAN 360

SEQ ID NO:1537

SEQUENCE LENGTH:358

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01750

SEQUENCE DESCRIPTION:

50 GATCCAGTG AATCCTGGGT CCAGGAGTAC GTGTATGACC TGGAAGTGAN CTGAGCTGCT 60
 CAGAGACAGG AAGTCTTCAG GGGAGGTCAC CTGAGCCCGG ATGCTTCTCC ATGAGACACA 120

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EP 0 679 716 A1

TCTCCTCGAT ACTCAGGACT CCTCTCCGCA GTTCCTGTCC CTTCTCTTAA TTTAATCTTT 180
 TTTATGTGCC GTGTATTGT ATTAGGTGTC ATTTCCATTA TTTATATTAG TTTAGCCAAA 240
 GGATAAGTGT GGCCTATGGG GATGGTCCAC TGTCAGTGT TCTCTGCTGT TGCAAATACA 300
 TGGATAACAC ATTGATTCT GTGTGTTTC ATAATAAAC TTTAAATAA AATGCAAA 358

SEQ ID NO:1538

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01751

SEQUENCE DESCRIPTION:

GATCCCTCCT CTAGGGGCCT GGGGACTTTN ACTGATGCTC TTCCTGATTC TAGAGCAAAG 60
 GTGTGGGAAG GGGAAATGGA GGAATGCCCT CCTGTCTGTN TCGTTCTCTG TGCCACAGCT 120
 ACAGATGCAG AAGGTTTCTC TGGATAGCAC ACCTCTGANT GTAAATCATG ATAAAATGGA 180
 TATTTGAAA CTTACTCCTA AGCTGTGATT TAGGGTGTAT TTCTACTTCT GGAAGGCTC 240
 AATATCAAGG GCTGAGACTT TTGAATTTG AATATTCGTT GGGTTTCATG TTAAGANGCC 300
 TGTGGTCTAG GAGTGCTATT CAGTGTTTCT TTTCTGATA AACACTTTGA ATAN 354

SEQ ID NO:1539

SEQUENCE LENGTH:352

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01752

SEQUENCE DESCRIPTION:

GATCTCAGTA TGGACAGTGT AACAAACAAA CAAAATGGC TGGACAGACT TCTTGTGTTT 60
 TGTAAATATA AACTAGGACA GTTCTGTAGG TTTGTTCACT GTGCTAGTGG AGTATTTCTT 120
 TAATGTAAAA CTTCACTTAA CAGAGAGATT CTTTGTGTTAG CAAGCTTGGN GTGATGATAN 180
 AGNGGTAAGA AATAATATAA ATGTTGAAGA AAGCATCACA ACAGAACTAT AGGAGTCTAA 240
 ATTTAATAAA TCTTTAAAAA AAACCACTGT CTAGAATATA TACCATGTTT TATTATTTAA 300
 AATCATTGTC TTAAATTTT GTTCAAAAAA TAAAAATTG AATAAATCA AA 352

SEQ ID NO:1540

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01753

SEQUENCE DESCRIPTION:

GATCAGACAA GCCCAAATG AGAGACACTC TACAAAATAA CTGGCCAGTA CGTTTTNCAA 60
 GTNCCAAGGC CGTGAACAAT AAGGAAAGAC TGAGGAACAG TCATGGACTG GAAGAGAGTA 120
 AAGAAATATG ATAATAACT GCATTGTGAG ATACCGATT AGATGTTGGA TTAGAAAAAG 180
 GACCAGAAAT AAGATTTTCA CAATGTCAAT TATTTGGTTT TGATAATTGT ACTGTGGTTA 240
 TGTAAAGATG TAACATTAGT AAGAGCTGGG TGAAGGGTAC ATGGAACTA TTATTTTTC 300
 CACCCTTTGA AAGTCTAACT TTTTCAAAA TAAAAAGTT TAAAAATAA A 351

SEQ ID NO:1541

SEQUENCE LENGTH:357

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01754

SEQUENCE DESCRIPTION:

GATCCCAGAT GCAGTGACTG GTTACTACCT GAACCGTGCT GGCTTTGAGG CCTCAGACCC 60
 ACGCATAATT GGGCTCATCT CCTTAGCTGC CCAGAAATTC ATCTCAGATA TTGCCAATGA 120
 TGCCCTACAG CACTGCAAAA TGAAGGGCAC GGCCTCCGGC AGCTCCCGGA GCAAGAGCAA 180
 GGACCGCAAG TACACTCTAA CCATGGAGGA CTTGACCCCT GCCCTCAGCG AGTATGGCAT 240
 CAATGTGAAG AAGCCGCACT ACTTNACCTG AGCCACCCAA CCTAAATGGT ACTTATCTGT 300
 NCCCATGTNC NTACACCAGC CTGTTTNNAT AATAAACTTT ATTGGTGGTA GGGNAAA 357

SEQ ID NO:1542

SEQUENCE LENGTH:412

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01755

SEQUENCE DESCRIPTION:

GATCAGGGCA GTAGGCATAA TTCAGCAACA AACAATCTTC CTTGGGAGA AACCTNTTCA 60
 TTCCAATCTT CTAATTACAG TGGTTCCTAT CTCAGGGATA CTGGACTTTN TGACGCAGAT 120
 GAACAATTAA GGGGAAAAGC TTCCCTTTTC CCTCTGTGGC AGTTACGATT TTNACTTCAG 180
 TCCTGAGAAA AACTTCAGGT TTTGAAAATC AGATGATGTC TTCTCCTTTT CCAANCACCA 240
 CACGTTGAAA GCNTTTATAA ATCCAAGTCT GAAACTCTGC GCTCTAGTAC TGCTGTAAAG 300
 NTACACAAC TGTCTTCTNN GTTCATATAA TCTNGGGGTA CNCACNCACA CACNCNTGTA 360
 TGGGGGGGGG GGNNTGGCGN TTNCCACCGC GCGTTCNTT TTTGNNGGGT CN 412

SEQ ID NO:1543

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01756

SEQUENCE DESCRIPTION:

GATCCCAAAA TGCTGCGGGG CAATGACAGC TCAGTTCCCA GAAATAAAAA TCCATTCCAA 60
 GAGGCCATTG TTTTGTGGT GGGAGGAGGC AACTACATTG AATATCAGAA TCTTGTGAC 120
 TACATAAAGG GGAACAAGG CAAACACATT TTATATGGCT GCAGTGAGCT TTTAATGCT 180
 ACACAGTTCA TAAACAGTT GTCACAACCT GGACAAAAGT AACACAGAAG AACCTTACTA 240
 TGATAATCTA CTTGGAATGT GGATAAATGT AAAANGNAGA AAAGTTAGAA NGNGCANTAT 300
 GTTTCCTTCT CTGTAACAGT GTCCTAACAG TGAATAATCA GGN 343

SEQ ID NO:1544

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01758

SEQUENCE DESCRIPTION:

GATCGANCTT NCTATGGACT CAAGCAGGTG NNGAAGGCCA ATNAAGCCAT GGCAATTGAC 60
 ACATTGCTCA TCAGCGATGA GCTCTTCAGG CATCAGGATG TAGCCACACG GAGCCGGTAT 120
 GTNAGGCTGG TGGACAGTGT GAAAGAGAAT NCAGGCACCG TTAGGATATN CTCTAGTCTT 180
 CACGTTTCTG GGGAAACAGT CAGCCAGTTG ACTGGGGTAG CTGCCATTCT CCGCTTCCTT 240
 GTTCCCGAAC TTTCTGACCA AGAGGGTGAT TCCAGTTCTG AAGAGGATTA NTGATTGAAA 300
 CTTAAATTT GNGACAATCT TTGTGTTTTT CTAAACTGTN 340

SEQ ID NO:1545
 SEQUENCE LENGTH:339
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01759

SEQUENCE DESCRIPTION:
 GATCTGCTTT CATTAACTGG AATTCTGTAG GAGATACTGG TGACCTAAGC TAAGTTGCAC 60
 TCAGCATACT CAGTGTCAAG CTAATGAGGT TCTATTATAA AGGTTCTACT TTTAATCTGA 120
 GGGAAAACAT GTTCAGGGCT TCTAGAACAC TAAAAAATTN GGNTTAAACC AGTGTNCAGT 180
 CTGGTGCCAA ACTTCGAATG GAATACAAAT NNACATAATC TGANCTTTGT NCACAGGTTA 240
 TCCTAATAGA GTAATTCTCC ACTTTGCTCT ATTGAAGTGT CTTAAGGGAT TTGTTTAAAC 300
 AGCTAAGTTA CTTGATTAAA ATAATGATAA AATTGTAAA 339

SEQ ID NO:1546
 SEQUENCE LENGTH:362
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01760

SEQUENCE DESCRIPTION:
 GATCTGGTAG AAGGTACCAG CTTCTTTTCC AGCTGGAGAG GCCCCAACAC TGGATGGTTC 60
 TGTAGGGAGC CTAGGGAGCC TGGTCATCAA CTTGCAATAC CTCACAGAGC CAGTTCACAT 120
 CCCACTCTGA GCTCCACGAA GAAACACTGC TTCTCCAGGC CCGGGGTGTG TGGGGAGAGA 180
 GGCAGAGGCA GCTGGAGCGC CGTTCTCTCC TGCTGGGACA CCGCTTGGGC TTTGGTATTG 240
 ACTGAGTGGC TGACAGTTAT CTTCCAACCC CAACTGGCTT GGGGGCAGGA CAAGGGCTTA 300
 GGCTTGATGG TGGNCAGGCT TGNCCTGCTC CCACCTGNGA TGCCCCTGCT CTGGGACCTC 360
 TN 362

SEQ ID NO:1547
 SEQUENCE LENGTH:335
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01761

SEQUENCE DESCRIPTION:
 GATCCTTTCA GAAAAGAAAC ACTGGGTCCC ATAGCTAAAT TCTCAACCGC CANGCACCTT 60
 CAGAAGAATC CAGCCTAATA CTGGAATTG TGCTATTATC TTCCTCTCCA GCCCCCAAC 120
 TCCATCCCTC ACCACAGTTG TCTAGGAAAT GACATGAATT CAATATCTAA TGTCAACCAA 180
 TGGGGAGAGC CACAACCTCA GGAGAGGTTT CTGAGCTGAG TCCCTTAATT TCTGGATGAA 240
 GAAGACCAAC AAGTTTTGTC CAATGTATTT GTTCTCAGA CCTTGCCTAG GCACTAAAAA 300

TAAATACTA GGTCAATGGA GGCTAATGTG GGAAA

335

SEQ ID NO:1548

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01763

SEQUENCE DESCRIPTION:

10 GATCATTAAAG GAAGGCGATG TAGATGTTTC AGATTCTGAT GATGAAGATG ATAATCTTCC 60
 TGCAAATNTT GACACATATC ACAGAGCCTT GCAAATAATA GCAAGATATG TACCATCATG 120
 AGTATACTGN TCCTTATTTT GAATGTTTAA TTCTCAAGAA AATTGTAATC AATTAGTAAA 180
 AATTATAAAA TGTTAATAGT ATTAAAGCTT GAGTCTTACA TTGCATTTTT TTTTNGNA 240
 15 NCCACTTGGG GAACCATTC ATNCTCCAAA ANGGGGCATT CCCATTTCCT NTTNATCCCC 300
 TNNAATGGTT TTNCAAAGTN NGTNTGCNGN 330

SEQ ID NO:1549

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01764

SEQUENCE DESCRIPTION:

25 GATCATGGTG GATGAGGAAG CCTCAACGTA GATTCCTGAA CTCAAGGTAC CAGCAAGANT 60
 GCNTTCTCCC AGTGTGCTCT CCCCAACATC CTAGGCACAG CTTTCATAAC CCAGTTTCTT 120
 AGGTGTAAGA AACTGTTTTN ATCTCATTTA TTAAGTCTCA GAACTTAACA GAAAAGGAAG 180
 CCTTTTAAAT ATTCTTTTAA ATNTATTTT AGATTAACAG TTTTGNACTT TACATTTTTT 240
 TATACAACCA NCCAGTTTCT TTNCTAGCCA ATCATCTCTG ANGAGTTGCT GTTCTTACT 300
 30 GACAATAAAA NNTGTNCTCT TGGTTCGAAA 330

SEQ ID NO:1550

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01765

SEQUENCE DESCRIPTION:

40 GATCAACATC TTTCTTGCC TCTGTCCCCT TCTCTCATCT CTTAGCTCCC CTCCAACCTG 60
 GGGGGCAGTG GTGTGGAGAA GCCACAGGCC TGAGATTTC TCTGCTCTCC TTCTGGAGC 120
 CCAGAGGAGG GCAGCAGAAG GGGGTGGTGT CTCCAACCCC CCAGCACTGA GGAAGAACGG 180
 GGCTCTTCTC ATTTACCCCC TCCCTTTCTC CCCTGCCCCC AGGACTGGGC CACTTNTGGG 240
 TGGGGCAGTG GGTCCCAGAT TGGCTCACAC TGAGAATGTA AGAACTACAA ACAAATTTTC 300
 45 TATTAAATTA AAATTTNTGT GTCTCCAAA 329

SEQ ID NO:1551

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS01766

SEQUENCE DESCRIPTION:

5 GATCCCAACT GCTCCCTNCC CTCGCCGGTG ACTCCTGCAC CTGCGCCGGC TCCTGCAAAT 60
 GCAAAGAGTG CAAATNCACC TCCTGCAAGA AAAGCTGCTG CTCCTGCTGC CCTGTGGGCT 120
 GTGCCAAGTG TGCCCAAGGC TGCATCTGCA AAGGGGCGTC GGACAAGTGC AGCTGCTGCG 180
 CCTGATGCTG GGACAGCCCC GCTCCCAGAT GTAAAGAACG CGACTTCCAC AAACCTGGAT 240
 TTTTATGTA CAACNTGAC CGTGACCGTT TGCTATATTC CTTTTCTAT GAAATAATGT 300
 10 GAATGNTAAT AAAACAGCTT TNACTTGAAA CAAA 334

SEQ ID NO:1552

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01767

SEQUENCE DESCRIPTION:

20 GATCTGTTTG GACTATGTTT TCTTTTCTTC TCCCACTTGC TCAGCAGCTT GGGCTTCCAT 60
 TCTAGTTCTT TTACCAAGAT TTTTGTGTGA CCATGTTGAC TTCATTTGGA TTGCCCTCTT 120
 TCAATTTCTT TGTGAAAACA CCCTTAACTT TCTCTTTACC CTTAGCTGAA ATGTTTACAT 180
 AGCTTCTGGT GATATCTTTN CATGATTTTA TATCTCTTAA AATGGTGATG GATGTGACAC 240
 CTCATAAAG TGAGCTTTGA ACTGTAGATA ACTCTTAAAG AAAATGTCAT TTTAGACAAT 300
 TAAATATTT GTGCTCAACT GCTTGAAA 328

SEQ ID NO:1553

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS01768

SEQUENCE DESCRIPTION:

35 GATCGAAATG TTAACACCGG GAGCTCTNCA GGACACTCAC CCAGCGACGC TCGTGGGGGA 60
 AACATACTAA ACGGACAGAC TCCAAGANCT GCCACCGCTG GGCCTGCACT GCGGCCCCC 120
 ACGTGAACTC GGTGTAAACG GGCCNCGGAA GAAAAGCAGA GAGAGAATTG CAGAGAATCA 180
 GACTCCTTTT CCAGGGCCTC AGCTCCCTCC AGTGGTGGCC GCCCTGTACT CCCTGACGAT 240
 TCCACTGTAA CTACCAATCT TCTACTTGGT TAAGACAGTT TTGTATCATT TTGCTAAAAA 300
 TTATTGGCTT AAATCTGTGT AAAGAAA 327

40 SEQ ID NO:1554

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS01769

SEQUENCE DESCRIPTION:

50 GATCAGCAGA CCACGTATTT AAAATTCTGA ATCTTCTGGG ACAGGGTTGT AACTCAGCCT 60
 TCCAAAGGGA AGAGTGCAGG GGGACGGGGC CATGATATGG GAAATGGTG TAACTAATG 120
 TATTTNTTTA TTGGCTGTGA TTCTGTATAA CACTCATATC TTGCCAAAG TTCAATTTTA 180
 TATTTAGGCA ACTGATGGTC CTTTTCATT TAGGATTTN GTTGTGTGA CCTTATACCT 240

55

EP 0 679 716 A1

CATGATATAA GGAATGGGCT CATGTGTCTT CCGTCTTTTG GAAGGAGGTT GACATATTTT 300
AAATAAATGC TTTTAAATAC AGTAAA 326

5

SEQ ID NO:1555
SEQUENCE LENGTH:387
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS01770

SEQUENCE DESCRIPTION:

GATCAAAAAG AACAGAACCC TCTCCAGCCT GCTGACCCGA ACCCAACCAC ACAATGGTTT 60
GTCTCAATCT GACCCAGCGG CTGGACCCCTC CGTAAATTGT TGACGCTCTT CCCCTTTCCC 120
GAGGTCCCGC AGGAGCCTAG CGCTGGCTG TGTGTCCGGC CGCTCCTCA GGCCTGGCCG 180
TGCCCGCTCA GGACCTGCTC CACTGTTTAA CACTAAACCA AGGTCATGAG CATTGCTGCT 240
AAGATAACAG ACTCCAGCTC CTGGTCCACC CGGCATGTCA GTCAGCACTC TGGCCTTCAT 300
CACGAGAGCT CCGCAGCCGT GGCTAGGATT CCACTTCCTG TGTCATGACC TCAGGAAATA 360
AACGTCCTTG ACTTTATAAA AGCCAAA 387

20

SEQ ID NO:1556
SEQUENCE LENGTH:325
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

25

CLONE:HUMGS01771

SEQUENCE DESCRIPTION:

GATCACAGAT GGATNTTGTT ATAAGCATCA ATGTGACACT TGCAGGNAC TACAACGTGG 60
NACATTGTTT GTTCTTTCCA TATTGGAAG ATAAATTTAT GTGTAGACTT TTTTGTAAGA 120
TACGGTTAAT AACTAAAATT TATTGAAATG GTCTTGCAAT GACTCGTATT CAGATGCTTA 180
AAGAAAGCAT TGCTGCTACA AATATTTCTA TTTTAAGAAA GGGTTTTTAT GGACCAATGC 240
CCCAGTTGTC AGTCAGAGCC GTTGGTGTTT TTCATTGTTT AAAATGTCAC CTGTAAAAATG 300
GGCATTATTT ATGTTTTTTT TTTTN 325

35

SEQ ID NO:1557
SEQUENCE LENGTH:322
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS01772

SEQUENCE DESCRIPTION:

GATCTGTAAT TCATAGTCAC ATCAAGGTCA TCAAGACCAG GAAAAACAAG AAAGACATAC 60
TCAATCCTGA TTCAAGTATG GAAACTTCAC CAGACTTTTC CTTCTAAAAT CTGGATGTCA 120
TTGACGATAA TGTTTATGGN GATAAGGTCT AAGTGCCTAA NAAAATGTAC ATATACCTGG 180
TTGAAATACA AACTATACA TACACACCAC CATATATNCT AGCTGTTAAT CCTATGGAAT 240
GGGGTATTGG GAGTNCTTTT TTAATTTNCC ATAGTTTTTT TTAATAAAAT GGCATATTTN 300
GCATCTACAA CTTCTATAAT TN 322

45

SEQ ID NO:1558
SEQUENCE LENGTH:319

50

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01773

SEQUENCE DESCRIPTION:

GATCTTTCTT TAATAGTGAA CCCCTGGGCC ACTGAAGAGT AACATGGCTC CACTGGACAC 60
 AAAAGAGGGA TGGAATCAAC AGGCAGGGGG CCTTTTATAA GCCTTAGGAA AAGAAAATGA 120
 AACTATTCA TCTTTGGACT TTTCAATACT ATTGGAGTGA TTTTTTTTTT TCTAAACAGG 180
 GAAAATAATG TTACAAAAGC ATCTTTTTTG TNATTGTGTT GCATCCCTCC CCCACACCCT 240
 GGTGTTTTAA ANTGANGAAA AAAANCCATC ACCTTTTGTA CAAAANCTCT TAATGNTTAA 300
 CAAACAAACA AANCAGAAA 319

SEQ ID NO:1559

SEQUENCE LENGTH:316

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01774

SEQUENCE DESCRIPTION:

GATCTGGCTG CGCTATGACT CCGGGAGCGN CACCCACAAC ATGTACCGGG AATACCGGGA 60
 CCTGACCACC GCAGCGCTGT CACCCAGTGC TACCGAGACA TGGGTGCCCG GCACGCGCCC 120
 GAGCCCACTC CATTANATC TNACAGCAGT GTTCTTGCAA TATGAGGAGA CAGTTACAGC 180
 CACATTATGG CTCTCATTGA ACAGTACGCA GCACCCCTGC CCCAGCCGT NTTTTGGGG 240
 CTTGCGCGAA AATCTACAAG CGGGAANGTG ACCTNGGATT CAAGGGCGGG GAGAGANGCT 300
 TNAATAAATA ATCGTN 316

SEQ ID NO:1560

SEQUENCE LENGTH:390

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01775

SEQUENCE DESCRIPTION:

GATCTAGAGG GTCGGACCCA CATATTTAAG ATTCACGNTC GTTCAATGAG TGTGAAAGA 60
 GATATCAGAT TTGAAGTGT AGCACGACTG TGNCCAAATA GCACTGGTGC TGAGATTAGA 120
 AGCGTCTGCA CAGAGGCTGG TATGTTTGCC ATCAGAGCAC GCGGAAAAAT TGCTACCGAG 180
 AAGGATTCTT TGGAAGCTGT AAATAAGGTC ATTAAGTCTT ATGCCAAATT CAGTGCTACT 240
 CCTCGTTACA TGACATACAA CTGAACCTTG ANGCGTTTCA AGTGAAAAC TTAATTGGA 300
 ATCCTAACCN TATATAGACT TGTAATAAC CAATTCATAA ACAAATAAAT GGCTTCAAAA 360
 TTGAAAAAAA NNNGANNNN NNNNAGNNNN 390

SEQ ID NO:1561

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01776

SEQUENCE DESCRIPTION:

GATCTGCTTA GAGTGGATT TCACTCAAGT CCTTAGTAAG TGGATTTTGG GGAAAAAGC 60

EP 0 679 716 A1

5 ACCTGGGCTT CTGGTTCTTT TTGATAATAT ATAAAATTAT TCATTATGAG GTTGCAGTTG 120
 TTGCAAAGG AGAGGCACTC AAATTTGAAA GGTATTTTA ATGTGATAAT TTGGAAGACT 180
 TACTCAGATG TTGGTCATTG ACCACTCTGT GCATATATTT CTGCAGAGCT CTGTGAAGGC 240
 AATGAGTGTC ACTTCCCTCT GCTCTAATAA AGCAATAAAT AATAGCTAAA GGGCTGACTT 300
 TCACTTCGAA A 311

10 SEQ ID NO:1562
 SEQUENCE LENGTH:310
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01777
 SEQUENCE DESCRIPTION:
 15 GATCTTTCTA CAACATTTAT CCTGGTTGTT AAGCCCTCCT TACAACATTC TTCTCTCTTT 60
 GTTTTATAG CTCCATCTCT CCTGCTTCTT TAACTTGATA ATGCATACTT GATTTTCCTA 120
 TTTGTNATTT CATAAACCAA TTAATACACA GATAAAATGA CTGTATATCA AACCATGTTT 180
 GTATAGAAAA ANTGGATTTN GGATGCCTCT CATATGTAAT TAGTTCTATT AAACATATTA 240
 ATNGTATTGT TTAATTNGTC AGGTTTTTGA CAGANTTTTG TTTACAGGTA ATAAANNTNT 300
 20 TATCTCCAAA 310

25 SEQ ID NO:1563
 SEQUENCE LENGTH:307
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01778
 SEQUENCE DESCRIPTION:
 30 GATCGAAAAA AAAATCCAGA ACCTGGGGAA ACTGTGGACC CTACTGTACC TCAAAAGCTT 60
 ATAACAATCA ACCAACAATG GAAACCCATT GAAGAGTTGC AAAATGTCCA AAGGGTGACC 120
 AAATGACGAG CCCTCGCCTC TTTCTTCTGA AGAGTACTCT ATAAATCTAG TGGAAACATT 180
 TCTGCACAAA CTAGATTCTG GACACCAGTG TCGGGAATG CTTCTGCTAC ATTTTtaggg. 240
 TTTGTCTACA TTTTNGGGC TCTGGATAAG GAATTAAAGG AGTGCAGCAA TAACTGCACT 300
 35 GTCTAAA 307

40 SEQ ID NO:1564
 SEQUENCE LENGTH:305
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01779
 SEQUENCE DESCRIPTION:
 45 GATCCTGTGG TTGGCCACTG GCCATAGCTG CTGCCCAGCT CTACCCCTCC CAGGGACCTA 60
 CCCCTCCAG GGACCGACCC CTGGCCCAAG CTCCCCTTGC TGGCGGGCGC TCGTGGGCC 120
 CTGCACTTGC TGAGGTTCCC CATCATGGGC AAGGAAGGGA ATTCCACAG CCCTCCAGTG 180
 NACTGAGGGT ACTGOCCTAG CCATGTGGAA TTCCCTACNC TGACTCCTTC CCCAAACCCA 240
 GGGAAAANAG CTCTCAATTT TTNATTTTIA ATTTTGTGTT GAAATAAAGT CCTTAGTTAG 300
 50 CNAAN 305

55

SEQ ID NO:1565

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01780

SEQUENCE DESCRIPTION:

GATCACAGCT AGAGAATTGA GAATTAAGTA TACTACTAGC CATTTTAGGG CACCAAAACT 60
TGGGATTAAA CACTTCCTAC TTCCCACTCC CAACTCCTGA AATGAAGTCT TGCTATCTGT 120
GACTAGTTTT ATTTTGTGC TTTTAATAGT CCGAGCAGTC TTACCTTGTT TACACATGTA 180
TTGACACCAT TTGCTTCAGG CCATGGAGCA CTGTTTCTCC CNITTTACTA TTTATAGGAT 240
TCCGTTTTTT CACAAGACTT TTAATAAAAA GAAATTGTAG AAATAAACAC ATTAATAATT 300
GAAA 304

SEQ ID NO:1566

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01781

SEQUENCE DESCRIPTION:

GATCTGCTTT CTCGTAATTA TAGATTGGTT TGCATTTTCT AGAAATTTT AAATAAATGG 60
AAACATATAG TGAGTACTCT TCTTGGGGTG GAAGGAAGTG TGTGTGGCTT TTTCACTCA 120
AGCATAATTA ATTTGATACT CATCCAGATT ATGCATGTAT CAATAGTTTA TTCCTTTTTT 180
ATTGCAGAGT AGTAGTTANN NNCCTGGGTA TNCACAATTT GTTACCTGTT CATCTATTGA 240
TGGNCAATTG GGGTATTTCC AGTTTtagct ATTACAAATA AACCTGCTGT GACATCATGN 300
CAAA 304

SEQ ID NO:1567

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01782

SEQUENCE DESCRIPTION:

GATCTGCTAT AGCTGTCCAT CAGAGAGAAT ACACGTGGCT ATAACATCTA TAACAAAACG 60
ACGATTCTC TACAAGAGGC TGTTTCTNAC TGCTAACGTT GGTGTTTCTG GCGTGGGAAG 120
AAATGCACAG GCGTGCATGG CATGCACGTN CAGACAGCTG CATTGTAAGA NTNCTGTCAT 180
GCAGTCTGAA AAGGGAAGAA ACAGGATGGC TTTCTGTAGC CACACCTGTG AGGCGTGATG 240
ATTGTNGTAT TATTAGATTA CTGATTTTCC TTTTCTGAAA ATACATTTGN NTTTTAATCA 300
CAAA 304

SEQ ID NO:1568

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01783

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCTGCTGT TGCTGAGAGT NTGAGCGTGG ACTTGATGCA GTNATGACAA ATCATTGCTT 60
 AGAATTAATG TTTTCAAATG TGCAACTCTA GTTTTTAAAA CAAAATTGG TTCTTTACAT 120
 TCATTATTTT GTTTTTGTTC CCCTTTAGTA TTTAATGGTC TTTGGAGAAA AAATAATAAA 180
 ACAGAGTGTT ATATATATAT TTTTGGTGC AAGATAAGAT TTTCTGTTTT TTGAAATAAG 240
 TCTGTAGCAT AAAAGGTAA ACTATTTTAA GGACANANTA AAAATAGGAG TGTATTTAAA 300
 CAAA 304

10 SEQ ID NO:1569
 SEQUENCE LENGTH:303
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01784

15 SEQUENCE DESCRIPTION:
 GATCCAGGGA TGAGGATAGA GTGGCCTGAG AGCAGTGCTT GGATTCAGCC TCCTGCTGGG 60
 TCCTTCTGCT GGATACAGGC ACCAAGAGGC GGGGGTGGAG CAGGGAGCTG CGCCTTCCTG 120
 GGGTGCCNGG TGGTGTGTAG AGAAAAGCTG CTTGTTTACT CCTTAAGTCA ATGTATTGGT 180
 20 GACTGTTGAT TTGTTGAACA ATTCAGGAAT CAAGGGCTGT GGAGAACTC CCTCATGTTG 240
 TTGGCAACAG GTGAATGAAC CTAGAGCGGT GACATGAAAA TAAAGCTCAC TGTTACTCGC 300
 AAA 303

25 SEQ ID NO:1570
 SEQUENCE LENGTH:302
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01785

30 SEQUENCE DESCRIPTION:
 GATCCCCCGA CGACGTGCTC GAGTTCCTGA AGGTGTATGA GANGCACTCT GCCCAGTGAG 60
 CACCTGCCCT GCCTGCATCC GGAGAATTGC CTCTACCTGG ACCTTTTGTG TCACACAGCA 120
 GTACCCTGAC CTGCTGTGCA CCTTACATTC CTAGAGAGCA GAAATAAAAA GCATGACTAT 180
 35 TTCCACCATC AAATGCTGTA GAATGCTTGG CACTCCCTAA CCAAATGCTG TCTCCATAAT 240
 GCCACTGGTG TTAAGATATA TTTTGAGTGG ATGGAGGAGA AATAAACTTA TTCCTCCTTA 300
 AA 302

40 SEQ ID NO:1571
 SEQUENCE LENGTH:307
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01786

45 SEQUENCE DESCRIPTION:
 GATCCATTTT GCTTACACTG TTGCATCACA AGGGACTCAC CCAGGGACCA TGACCTGCTG 60
 GTGTGTGTGT ATATTTACAA AAACAAAACA AACAAACCAC CCATTGGGAT ATAAGGTAGC 120
 AATCACAAC TAAAGACTGC GGCTTGTGA GGTGCAATAC CCTGACTCCC AAAGTTAGTT 180
 ACAGTGGGTT TTATTGTTTT TGTGACTGAA GGATTTATTC AGACTGCTGT ACTCTTCATT 240
 50 TGATGTAACA AAATGCTATT AATCTAAATA TTTGTAAATA AAGTACCTGT ATCTAGATTA 300
 AATTAAA 307

55

SEQ ID NO:1572

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01787

SEQUENCE DESCRIPTION:

GATCCATTAC CTAGGGTAAA ATTCTCCTGA ATGTCAAACA AAGAGATAAA CTACATTGG 60
 GTTTTGGGAA GTCCCTGTGA ATGATGAATC AAGAATCCTC AAGTCTGTCT TGCCACCCAT 120
 TTAATACGTA TTTTGTAA GGCTGAAGTT TAGAGTTAGA ATCAGGACAT TTTGGCCTAT 180
 TGAGAGGTTT TGAATCCAA CAGAAGATGC CATGTAAATC AGTGAATTTN ATTCTTTTAA 240
 AAGCAACTTA CAAAATTTAC AAGATGTATT CAATAAGCA GTTTAGCTTT GGTATATCAA 300
 A 301

SEQ ID NO:1573

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01788

SEQUENCE DESCRIPTION:

GATCCTCAGT GTGCTCACGG GGCTGCTGTT CGGCAGCNAT GGCTACTACG TGGCGCTGGC 60
 CTGGACCTCA TCGGCGCTCA TGTACTTNAT TGTGCGCTCT TTGCGGACAG CAGCCCTGGG 120
 CCCCAGACAG ATGGGGGGCC CCGTCCCCCG GNAGCGTCTC CAGCTCTACC TGA CTCTGGG 180
 AGCTGCAGCC TTNCAGCCC CTCATNATAT ACTGGCTGAC TTTCCACCTG GTCCGGTGAC 240
 GTCTNGCCCC AGATGGNAAT NAGTTTTTTA ATTCATTGN AAGGATTTTG AANTCCTTG 300
 AAA 303

SEQ ID NO:1574

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01789

SEQUENCE DESCRIPTION:

GATCTGTGTT CGAATCCTCC CCACCCCTTT CTTTGTGGAG TTTCTAACC TGCTGCTGAA 60
 GCACAATGTT TTGGTGCTTT CTTTCTCNN TTGTAAAGG CAGTGTCCTA AAGCCATTCC 120
 AGATGCCAAG ACCAGGGGCT TATTTCTAGG GAAGGTAGGT CGGTTTCCAT GTTCCCTCC 180
 CGTTATTTT ATTTTNACT TTTGCCTGA GACAAGCCGA GTATGAGGTG GTTTGATTTA 240
 AGAAAAATCA ATGAAATTGT TTA CTACTGT TTTAAATAA AACCGTAAAC TCTGAAA 297

SEQ ID NO:1575

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01790

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCAGGCCG TTNCTGAGCT CAACGGGACC CAGGTGGAGT CTGTACAGCT CAAAGTCAAC 60
 ATAGCCCGAA AACAGCCCAT GCTGGATGCC GCTACTGGCA AGTTTGTNTG GGGCTCCCTC 120
 GCTGTCCAGA ACAGCCCTAA GGNTTGGCAC CGGGACAAGA GGACCCAGAT TGTTTACAGT 180
 GATGACGTCT ACAAGGAAAA CCTTGTGGAT GGCTTCTAGG GAACAGNGCT GGATTCCTTG 240
 TGCCTCATAT GCCCAAATG CTGGTTTTCA GTAAANCACT TGAGGGTGGA AGCTTNAAA 299

10 SEQ ID NO:1576
 SEQUENCE LENGTH:300
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01791
 SEQUENCE DESCRIPTION:
 15 GATCCAAGAT AAAGAAGGCA TCCCCCCCGA CCAGCAGAGG CTCATCTTTG CAGGCAAGCA 60
 GCTGGAAGAT GGCCGCACTC TTTCTGACTA CAACATCCAG AAAGAGTCGA CCCTGCACCT 120
 GGTCTGCGC CTGAGGNGGT GGCTGTTAAT TCTNCAGTCA TGGCATTGCG AGTGCCCACT 180
 GATGGCATT CTCTGCACTA TAGCCATTTG NCCCAACTTA AGTTTAGAAA TTACAGGTTT 240
 CAGTAATAGC TNGAACCTGT TCAAAATGTT AATANAGGTT TCGTTGNATG GGAGCATAAA 300

20
 25 SEQ ID NO:1577
 SEQUENCE LENGTH:295
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01792
 SEQUENCE DESCRIPTION:
 30 GATCTGGCTT CTTTCCCAAG GNGGGGGTGG GGTGTNCCTN GCGTCCCTGT CCTTGANGGA 60
 CCTCCTTCCC CCAGCCTCAT CACCGTGCTC TTCTCAGCGC CACCCTCAGC AGCCAGATTG 120
 CAACACCAGG GAGAGGCCGA TGCAGAGCCC CACCGGTGGG AAAGTTGCCT GTGGAAGGGA 180
 GCCTTTTGT ACAATTTGTA ACTTATTNCT TAAAGTCTAT TTTGTAACAA TTTATTTAAG 240
 TTTAAAAAA GGAAACTGC TGCCCNCCAA AAAAAGAAAT TTTCAAAACA AGAAA 295

35 SEQ ID NO:1578
 SEQUENCE LENGTH:297
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01793
 SEQUENCE DESCRIPTION:
 40 GATCTAAAGT TCTGGCTGTC CATTAACCTC CAACTATGGT CTTTATTCT TGTGGTAATA 60
 TGATGTGCCT TTCCTTGCCT AAATCCCTTC CTGGTGTGTA TCAACATTAT TTAATGTCTT 120
 CTAATTCAGT CATTTTTTTA TAAGTATGTC TATAAACATT GAACTTTAAA AAACCTATTT 180
 45 ATTTATTCCA CTAATGTAGC AATTGACAGA TTAATAAAAT GTAACCTCAT AATTCTTAC 240
 CATAACCTCA ATGCTNNTT TTAATAATA AAAATTAAAA ATGAAAAGNG NTANAAA 297

50 SEQ ID NO:1579
 SEQUENCE LENGTH:289
 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS01794

SEQUENCE DESCRIPTION:

5 GATCTCTCTT GTCCNCTNCT GCTCTTNNCT TGGTGCTCTT TTNCTCGGT GGGGTGTGGG 60
 TAATAGAACA GCCGTGGGCT TTTGGGGACC TTAACTTTT TTNCTCTCT TTTGTTTATA 120
 AAAAACACTA AACATTCAAT TCCAGAGAAC CAAAAATCCC ACCTTCCCAC CGAACACTAC 180
 TAAGGGGCTT GTGTTCTGCN CCATACCTTT NCTCTTNNCT TTCTGTCTTG TTAATGCTTT 240
 10 TAAAAACAAA TGAGTTTTTT ATATAAATAA AGTTTTTAAA GTGTGTAAA 289

SEQ ID NO:1580

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01795

SEQUENCE DESCRIPTION:

20 GATCCCATCC GCATGGAGTT TGAAAAATAAG GAAGACTTGT CGGGAACACA GGCAGGGGCTC 60
 AACGTCATTA AAGAGGCAGA GGCACACNCC NGGTGGGCAG CCAAGGAGCT GAGAAGANCG 120
 AAGAAGCTTT CAGACTACGT GGGGAAGANT GAAAAANCCA AAATTATCGC CAAGNTTCAG 180
 CAAAGGGGAC AGGGAGCTCC AGCCCGAGAG CCTATTATTA GCAGTNAGGA GCAGAAGCAG 240
 CTGATGCTGT ACTATCACAG AAGNCANGAG GNGCTCANGA GATTGGN 287

25 SEQ ID NO:1581

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS01796

SEQUENCE DESCRIPTION:

35 GATCTATTGG CATATTCGGG AGCTTCTTAG AGGGATGAGG TTCTTTGAAC ACAGTGAAAA 60
 TTAAATTAG TAACCTTTTT GCAAGCAGTT TATTGACTGT TATTGCTAAG AAGAAGTAAG 120
 AAAGAAAAAG CCTGTTGGCA ATCTTGGTTA TTTCTTTAAG ATTCTGGCA GTGTGGGATG 180
 GATGAATGAA GTGGAATGTG AACTTTGGGC AAGTTAAATG GGACAGCCTT CCATGTTTAT 240
 TTGCTACCT CTTAACTGAA TAAAAAAGCC TACAGTTTTT AGAAA 285

40 SEQ ID NO:1582

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01797

SEQUENCE DESCRIPTION:

45 GATCCTCCCC TTTTGAAATG GCCCTGCTGT GTCAGTTTCC CTGTGGCCTT TTGAACTGTA 60
 CATCTCACAT GTTGGGAAAC GCTGGCCACT GGGAAATCAT TAGAAAGGAG GCTGTAGAAT 120
 ATTTGCCGAG CCTCTACTGT ATACCAGGGG CTAACACACC AAGCACATTC TAGGAATTGG 180
 GCCCTGCTCA TGAGGAGCCT TAGTGGAGAT TCCAGGTGAA TATTTATGAA AAAGTCAACA 240
 50 TTAGAACTGA AAATGGAAAT AAAGTCTTG AAAAGACAAA 280

55

SEQ ID NO:1583

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01798

SEQUENCE DESCRIPTION:

GATCAGAATG GACTTCTNCC ACTGAGCATG ACANGCACTC GAAAGGCTAA ATCAACCAGA 60
 AACATCGAAA CAAAAGCTCA GGTGTGCCCC CCGGCACGCT CCACANCTGG TGACCCGACA 120
 GTTCCTGGCT CCTTGTTTACAG ACAGCTTGTC AGTNAAGAAG ACANCACGTC TGCACCTNCA 180
 TTATTCAAAC TTGGCTGGCT CTCTAGTATG ACTACGNACA TGGAAACACAT CTGTCTCTCC 240
 CTAAATAANT ACTACCACAT TATTNCTTCT AAA 273

SEQ ID NO:1584

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01799

SEQUENCE DESCRIPTION:

GATCCATATT TGTTTTGTGT TCTGCTTAAA TCAGCAAGAA TGATAAATTT GATGGTGTGA 60
 AATTGGAAGT ATCAAGGGCT TTCTTTGGTG ATTGAGGGAA ATAATGTCTC TACTTGTAAT 120
 TTATTGTGAC CCTTTTTCAC TGTATATGCT TTGTATGTCT AATATTTATT TCAATGCAAA 180
 TTCAATTNNC CCTTCATCTG TATTGTTATA TCTAAGATTT TATTGATGTT AAAATCTAAT 240
 TGTGGAATAA AAATCTCTCT GGAATTTAAA 270

SEQ ID NO:1585

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01800

SEQUENCE DESCRIPTION:

GATCTGCTTG ACAGTGATTA AATCCTTAGC TCACATCCAT TCCCATCTTT NGGGCTCCTT 60
 AGGCCCAAGG ATGGCATGTG ACTGGTCCCT GCAAGGTCCT TTCTTTGTCA CCAGCCAAGG 120
 CATTGATAAC CAAGTAGCCA TTTTCTCTT AAGGTTTCCT CTACAACCCC AAGGACTTTC 180
 ATGATTATCC TCAGGGACAG GATTGGAGGC ATTGAGCGTG TTTATTAACA AATTGTTTTT 240
 GGTAATAAAA TAAATGCTTG GACTCTTAAA 270

SEQ ID NO:1586

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01801

SEQUENCE DESCRIPTION:

GATCTNGTAA ACTCTCTGTA TATCTTCCTA CCTTCAAAA TCGTTCITAG GGTTAGTCAA 60
 GTCTGGAATA TAATTGCTGA CTATAAAGTT AGCAATTATG CTTTAAAGGT GTTGTCACAT 120
 CAACCTAAAG AGAACCATCT ATGGAAGGTA TGTTGAAAC ATCTGTAGGA ACACAGAACT 180

GGGATTTAC TGAGTTTACC ANNTCAACTG TGTGAACTGT TTCTGCACTG CTTGCTAATG 240
GCTTCATCTA ATAAATGTTT ACTTATAAA 269

5 SEQ ID NO:1587
SEQUENCE LENGTH:267
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01802
10 SEQUENCE DESCRIPTION:
GATCTAGGGA AGTCAACACA TAGTGTAATA TAATTACATG CCTAATGAAA AGAAGATGTC 60
ATTTCTTAAT TTTNATATCT CATTTTCGGC ATTTTITAAA ATGTAAAAGG AAAACCTCTT 120
GTGTTACACAC AGATTGCTGA ATTGATTCTT CCATATTTGT TAATAATTTA CTATTATTTA 180
15 CAAAGATTCA AATGCTTTTA TGACTAATGT AAAATGAAAA GAGGCTTACA TTTTAAATGT 240
TATTAATAAT ATGTACTTAA ATCTAAA 267

20 SEQ ID NO:1588
SEQUENCE LENGTH:288
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01803
SEQUENCE DESCRIPTION:
25 GATCGCTTTG AGGTCAATAT TAGTGAGCTG CCTGATGAGA TAGACATCTC CTCCTACATT 60
GAACAGACAC GGTAGAAGAC TCGCCCATTT TGGAAATGTGA CCGTCTNTCC TTCAGGNGAG 120
GACACCAGGN TGGGGGTGAA GGAGACACTA CTGCCCCCAG CCCTGACAGC CCCCACCCCA 180
TGGCTTNCAT CTTTTCATN ACCANCACTC CTGAACCCCN ATTTCTNATT TGTCAGAATT 240
30 TTTTNNNTA ACAAACCTAG AAATGNANCA CATGGGGTCT GTGGTAAA 288

35 SEQ ID NO:1589
SEQUENCE LENGTH:266
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01804
SEQUENCE DESCRIPTION:
GATCTTGCCT GTTTCACAAT GTAACAAGAC TCTACCTGGG TCCCCTGGTG ATGAGTTTCA 60
GCATAGAATA ATGTTCAAGG AAAAGAAAAC GAAAACAGTT TAAATCTCTA CCACAGCCTC 120
40 ACAAGCAAAT GCTAAGGGGA ACATACATGT AAAANGCCAG CAAACTATCT TCAAACCTCT 180
CCGTCCTTAA TGTCTTCCAT GGCTATTGCC CCCACAATGG TCTCTTTNNT CCCTGCTCCC 240
TTATTAANGA ACTCTTTCTG AAGAAA 266

45 SEQ ID NO:1590
SEQUENCE LENGTH:266
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01805
50 SEQUENCE DESCRIPTION:

55

EP 0 679 716 A1

GATCTATGAC TCCAACCGTA TGATTTTNTT GCCTCCCCAG TTTTCATCCC AGTGGTAACG 60
 CCTGATTTTT GGTAGCTATG CCATCTTCTG CTGAGGATTA CCATTACTGG GTGTATCACC 120
 CCAGTACTTC CAAATNCCTC TCCTCTATTG ATTCAGTTGT TATTGCAGTG TCTGCTTCAT 180
 CCGTGGAAC TGAAGGCTCAG ATGCCCCCTG CTCTGTAACC CTGGGGAATG TCAGAGGCAG 240
 GTAATAAAGG TTGTTTAAAC AATAAA 266

SEQ ID NO:1591

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01806

SEQUENCE DESCRIPTION:

GATCAGGAGA CTTTGAATTN ATATATTTTA ATCCTNATTA AGCTTAAATA GGAAAGTTTC 60
 TTCAACAGGA TTACAGTGTA GCTACCTACA TGCTGAAAAA TATAGCCTTT AAATCATTIT 120
 NATATTATAA CTCTGTATAA TAGAGATAAG TCCATTTTTT AAAAATGTTT TCCCCAAACC 180
 ATAAAACCTT ATACAAGTTG TTCTAGTAAC AATACATGAG ANAGATGTCT ATGTAGCTGA 240
 AAATAAAATG ACGTCACAGG GCAAA 265

SEQ ID NO:1592

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01807

SEQUENCE DESCRIPTION:

GATCTGAGAG AAGCCCTGTC CTCCACTCAC CTCACCCGCC GCTGCCACCA TCTCCTCTGT 60
 GCCAACTCCT TGTGGACCGC AAGAAAGCAT GACTTTGAAA AAGGGAAGCC ATTCCGAGAT 120
 TTTAAAAATG TCAATGGACTA TTCCATATTA AAAGCTGTTT TTGTTGTACA AAATCACTG 180
 ATGTTCACTT CTATTTTATT TTGCCTTCAG AAAAGAAGAA AGTCAAAAAT AAAACTTTTG 240
 TGTATTACAG CAAA 254

SEQ ID NO:1593

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01808

SEQUENCE DESCRIPTION:

GATCCTGGAG GATTTCCTAC CCCCCTCCTC TTCGAGNCCC CAGTCGTGAT GTGGAGGAAG 60
 AGCCACCTGC AAGATGGACA CGAGCCACAA GCTGCACTGT GAACCTGGGC ACTCCGCGCC 120
 GATGCCACCG GCCTGTGGGT CTCTGAAGGG ACCCCCCCCC AATCGGACTG CCAAATTCTC 180
 CGGTTTGCCC CGGGATATAA TAGAAAATTA TTTNTATGAA TAATGNAAAT AAAACACACC 240
 TNGTGGCATG GCAAA 255

SEQ ID NO:1594

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01809

SEQUENCE DESCRIPTION:

5 GATCCATGAA GGAGGGCTGT GTGGAGAAGA TTGGGGACTG GCTGAGGAAA AATGTGCTGG 60
 TGGTAGCTGC AGCAGCCCTN GNAAATTNCT TTTGTCGAGG TTTTGGGAAT TGTCTTTNCC 120
 TGCTGCCTCG TGAAGAGTAT CAGAAGTGGC TACGAGGTGA TGTAGGGGTC TNGGCTCCTC 180
 AGCCTNCTCA TCTGGGGGAG TGAATAGTA TCCTCCAGGT TTTTCAATTA AACGGATTAT 240
 10 TTTTTCAGNC CGAAAAGNGA TGGTCTGAGT TTNTCTTAGA AA 282

SEQ ID NO:1595

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01810

SEQUENCE DESCRIPTION:

20 GATCAAATAA ACCAGTGTAG GATATTAAGA CTATCAATTG GTGGGATTAG GCTTGACATT 60
 TTATTTTAT AAATATATAT TTNTCCTGAA TGTGTCTGAG TCCAAGAGTG GGCAAAAAAT 120
 AATTTNCTAC TTTGGACTAA TCTATAGAGG TTTTGAAG TCTGCATTAC TAACTTGTG 180
 AATTCATGAT ATTCTGCCTA TGGCACAAAT TGTAACCTT TGTTTNCTA AAATAANGTA 240
 ATTGAAAACC TGNAAA 256

25 SEQ ID NO:1596

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01811

30 SEQUENCE DESCRIPTION:

GATCTGCGCT TCCAGAGCGC ACTAATNCGG TGCTTTGCAG GAGGCAAGTG AGGCCTATCT 60
 GGTGGCCTT TTTGAAGACA CCAACCTGTG TGCTATCCAT GCCAACGTG TAACAATTAT 120
 GCCAAAAGAC ATCCAGCTAG CACGCCGCAT ACGTGGAGAA CGTGCTTAAG AATCCACTAT 180
 35 GATGGGAAAC ATTCATTCT CAAA 204

SEQ ID NO:1597

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS01812

SEQUENCE DESCRIPTION:

45 GATCATTATT ATATATAGGT ATTGATTGCT ACCCTGACCA CAGTGCTTTG GACTATGAGA 60
 AACTTCTTAG ATTTTATAT GTAAATNCTG TGGACCACTG GGAGCACAAT GCCCACATCA 120
 TCTTAAGNNG AGTTTATGTG CAGCATTTAA ATCACTGTGT TTTCTTGTT AACTAAAACA 180
 GACATGGGCT TTGATTTTTT TCATACTATT AGACCATATC TCATAAAACC TTTTGAATTA 240
 ATGAAA 246

50 SEQ ID NO:1598

55

EP 0 679 716 A1

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01813

SEQUENCE DESCRIPTION:

GATCACGCAC ACACAATAAG TCTTTCTCTC CGAAACCGGA AGTAAATCTA TATCTGTTAG 60
AAATAATGTA GCCAAAAGAA TGTAAATTTG AGGATTTTTT TGCCAATAGT TTATAGAAAA 120
TATATGANCC AAAGTGATTG GAGTTTGTA AAATGTAAAA TAGTATGANC AAAATTGCA 180
CTCTACCAGA TTTGAACATC TAGTGAGGTT CACATTCATA CTAAGTTTTT AACATTGTGT 240
TCTTTTGCA TTCATTTTTT ACTTTTATTA ANGGNTCAAA CCCGN 285

SEQ ID NO:1599

SEQUENCE LENGTH:241

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01814

SEQUENCE DESCRIPTION:

GATCTAACTA TGTTCCCC CTTTCAAGAA TAGAACTATT GGGGTGAGGA TAAGGGGTGG 60
GGGAGAAAAA ATCACTGTTT GTTTTAAAA AGCAATCTT TCTGTAAACA GAATAAAAGT 120
NCCTCTCCCT TCCCTTCCCT CACCCCTGAC ATGTACCCCT TTNCCCTTC TGGCTGTTCC 180
CCTGCTCTGT TGCCTCTCTA AGGTAACATT TATAGAAGAN NTGGAATGAA TCTCCANGAA 240
A 241

SEQ ID NO:1600

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01815

SEQUENCE DESCRIPTION:

GATCCAGAAT ACCCTGACCT CGCCCCAGTT CCAGCAGATG TGAAGCGTT TGCCAAAGCC 60
ATGCAGAACA ACGCCAAGCC CGAGCAGAAA GAGGGCGACA CGAAGGACAA GAAGGACGAA 120
GAGGAGGACA TGAGCCTGGA CTGAGCCACG CGCCGTCCTC CGAGGAACTG GGCCTTGCA 180
GTGCGTTGCA CACCCTCACC TCCCACCCAC TGATTATTAA TAAAGTCTTT TCTTTTAAA 239

SEQ ID NO:1601

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01816

SEQUENCE DESCRIPTION:

GATCCAAAGT AATATGTAGG TTCAATATTT TGTAGGTTTT ATAATCAAAT GTCTCCCTAA 60
AGAGATGACA TAGGGAAGAA AAGCCTAATG TATCATCTTA ATGGATTGAG TTTTATTAT 120
GCACAAATAA CTGGGCTTGT AACCTAGGAA TATGATTAGA GCGTGATGCT GGCTTAAAA 180
ATAGGACTNG TGAATCACAG TTTGTNNNTA ATAACTACT GGTGGAAAT ATTAAA 236

SEQ ID NO:1602

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01817

SEQUENCE DESCRIPTION:

GATCTCCCCG CCGCAGCCTC CTCAGAAGAC ATCGAGCGGT CCTGAGAGCC TCCTGGGCAC 60
 GTTTGTCTGT GTGCTGTAAC CTGAAGTCAA ACCTTAAGAT AATGGATAAT CTTGGGCCAA 120
 TTTATGCAGA GTCAGCCATT CCTGTTCTCT TTGCCTTGAT GTTGTGTTGT TATCATTTAA 180
 GATTTTTTTT TTTTGGNAAT NATTTTGAGT GGCAAANTAA NGATTAGCAN TTTAA 235

SEQ ID NO:1603

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01818

SEQUENCE DESCRIPTION:

GATCTGCCCA GGTGCGCCAG ACTTCCTAGC ACACGTGCGC GGGAGCAGCT GCTTTGAGTG 60
 CACACACTAC CAATCGTTCC TGGAATACAG GGAGGTGGTG GACGGCCTGG AGAAGGCCAT 120
 CTACAAGGGC CCAGGCAGCG AAGAGGGCCC TGAAGTCCCC CCCCAGCCCC CCTCTCGGGC 180
 TCTCTCAGCC AGCCTGGTAC TGAAGGTGCC AGACGTGNTC CTGCTGACCT TCTGCGGCTC 240
 CGGGCTGTGT CCTAAATGCA AAGCACACCT CGGCCGAGGN CTGCGNCCTG ACANGGNNAC 300
 CTCTCTGAAC TGCAACACTT GGAN 324

SEQ ID NO:1604

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01819

SEQUENCE DESCRIPTION:

GATCAAAAAG CAAGCAGAAA TGAATCCACA TTCTAGTCCT TTATGCAGTA TACAAGGAGA 60
 ACTGTCTGT AGGATATTCT CTTCTGATG GTGCAGAAC CAGAATTAGA AGTTTGTGGT 120
 TACAGCATAC TCTGTCCTTC AGAAAGGCGT GATTCTAGCT GTTGACCCCT TGCAGCTGTT 180
 GGAATCTCTG CAAGAACCTC TGTATTCTTC TAATAAATTC CCTCTTTAT TTTAA 235

SEQ ID NO:1605

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01820

SEQUENCE DESCRIPTION:

GATCCCAACA ATGAAGCCAT TCGAAATGCT ATGGGCTCCC TGGCCTCCNA GGCCACCAAG 60
 GACGGCAAGA AGGACAAGAA GGAGGAAGAC AAGAAGTGAG ACTGGAGGGA AAGGGTAGCT 120
 GAGTCTGCTT AGGGGACTGC ATGGNAAGCA CGGAATATAG GGTTAGATGT GTGTNATCTG 180
 TAACCATTAC AGCCTAAATA AAGCTTGCCA ACTTTTTTCC CTTTTTTGCT TCAAA 235

SEQ ID NO:1606

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01821

SEQUENCE DESCRIPTION:

GATCAAAAAG AGAGTGGTTG TGGAACTGT TGGCCCAGTT GGTTC AAGC CAGAGACATT 60
 CAGAAAGTTT TTAGCTCTAT ATTTGCATGG TGCTGCGTGA NGGAGGACCC CTCTGAATCC 120
 TGA AACCCCT CTTGCCTCTC TTCCACGGAA GAGGGCCTGG GCCCCGTGGA GCCTCAGTGC 180
 CCGTTTGGCC TGCTGCTCTC GCTGACAATA AAGAGCCCTT GCGTTGCACT GAAA 234

SEQ ID NO:1607

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01822

SEQUENCE DESCRIPTION:

GATCTGGAAC CTCAGCCTGG CCAGACACAG GCCCTCCCTG TTCCCCAGAG AAAGGGGAGC 60
 CCACTGTCCT GGGCCTGCAG AATTGGGTT CTGCCTGCCA GCTGCACTGA TGCTGCCCCT 120
 CATCTCTCTG CCAACCCCTT CCCTCACCTT GGCACCAGAC ACCCAGGACT TATTAAACT 180
 CTGTTGCAAG TGCAATAAAT CTGACCCAGT GGGCCCACTG ACCAGAACTA GAAA 234

SEQ ID NO:1608

SEQUENCE LENGTH:356

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01823

SEQUENCE DESCRIPTION:

GATCACATAA AACAGATTTG CATAAAATTA CCATGATTGC TTTATGTTTA TATTAACTT 60
 GTATTTTGTG ACAAACAAGA TTGTGTAAGA TATATTGAA GTTTCAGTGA TTTAACAGTC 120
 TTTCCAACCT TTCATGATTT TNATGAGCAC AGACTTTCAA GAAAATACTT GAAAATAAAT 180
 TACATTGCCT TTGTCCATT AATCAGCAAA TAAAACATGG CCTTAACAAA GTTGTGTTGTG 240
 TTATTGTACA ATTTGAAAAT TATGTCGGGA CATACCCTAT AGAATTACTA ACCTTACTGC 300
 CCCTTGTA GA ATATGTATTA ATCATTCTAC ATTAAAGAAA ATAATGGGTT CTTAAA 356

SEQ ID NO:1609

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01824

SEQUENCE DESCRIPTION:

GATCACCTAT GCCAAGAAAT AACATTGGG ATAGTCGTCT TAAAAAGACT TGGTGTTATT 60
 TACAGTGTGTT GTTTTGATAA CATTTGGCTG GGTCATTTTA ATAGTTAGAG ATGAGGAGGA 120
 GTAAAGTGA AATTTTGTG AAGGACTTAA ATTATCCAGT GTTCTTTAG CCTTGGTGAA 180

CTATGAAATA CGAAGNCCTT AATTTTGTAC AATAAACTTT TATTTGTAAA

230

SEQ ID NO:1610

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01825

SEQUENCE DESCRIPTION:

GATCTGTTGA ATATTTGCTA AAGACCAGTT CTTTAAGCTA AGACATGTAA AAAATCCCAA 60
 ATGGCAGTAC CTCATTGTTT ACTTAGCTTT TGTACTTATA TTTTTCAGAG GAAAAAACAC 120
 TACTGTAAAT TGTGAATAGC CAATACATAA CTGTATTGTA TGCAAACTCG TGATTGTTGG 180
 CAGTGTCA TC TGAGAAAC AGATAAATAA AGTTTATTTA CTATAAA 227

SEQ ID NO:1611

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01826

SEQUENCE DESCRIPTION:

GATCTAGCCA AGGCTGGTCT GCAGTATCAG ATGTCCAAAC TCATCTACTA TTAGCCATAT 60
 TTTGTGAGTC GTTTGTCTAA ACTTTGTCAA AAATGCCTTT GCCATGATT TGTGCTATC 120
 TGGATTTC AA ACATGGACAG TTAGGAAGAT GTGCATTGAA GTAGGAAAAT TTTGTTTCA 180
 TTTGCTGTTA TTTATTTTTT AAATTAATAA TGGAAATGTA TTTTAAAGTT TAAA 234

SEQ ID NO:1612

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01827

SEQUENCE DESCRIPTION:

GATCTGTTGG GTTCTCTATT AATTTATTTT ATACATTATA GATTCTGGGT TGATAAATTC 60
 TGCTCAATTT GAAAAATTTT ATATTTTGTG TCAAATCTGT TACAATTTAT ATTGGTGGGN 120
 GCAAAAGTAA TTGCGGTTTT TGCCGTAGAC AGTAATGGCA AAAACTGACA ATTGCTTTTG 180
 CACCACCCTA ATAATATTAA NTATAATCAT GACTTTAAAC ATCAAA 226

SEQ ID NO:1613

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01828

SEQUENCE DESCRIPTION:

GATCGGGAAC TGGCTCCGTT GTGCTGAGGT CATCTTTGGT CATCAGCCTC CAGCATNTGG 60
 AAACACCTCC AACGCAATGT GGCTTTTACA TTTCTTTCTT TCTTCTTTT TTTTCTCTGG 120
 TACTGGGAAT ACACAACACC AGCTGTTTTA TTATTATTG GGGAGGGGGT TGTGATTTTA 180
 TTATTNGTTT TTTTAAATG AAAAATAAAA NGTTATATAT TAAA 224

5 SEQ ID NO:1614
 SEQUENCE LENGTH:222
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01829
 SEQUENCE DESCRIPTION:
 GATCAGCAGA TACATGTCAG TGCAGAGGTT CTCTGCCCTC CAGAAGCCCT CGTCTGGGAA 60
 TTCGAGAGAG GAGGAGGACC CAGGGCCAAA GGAATCCTCA AACTTCCCTC CAAGGGAGAT 120
 10 ATTGTAAGGG GAAAACAAAG TGTATTTC CCCAAAACAA CCCAGCTTCA CCCCATGTCC 180
 CTTCTACACG CTTACTCACT GAGGGTGAGT GGAACGNTA AA 222

15 SEQ ID NO:1615
 SEQUENCE LENGTH:222
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01830
 SEQUENCE DESCRIPTION:
 20 GATCAGAATA TGTATGCAGT TCTTTCTTTA ACCCTTTTTT CTCCTATGTA CTGTGAACAT 60
 TTAAAAAGTA CTTTAAATA TTCTTTGGAA ACTTAGCTTT TAGTAACTAC TTGGTTGTAT 120
 CATAATTNAT TAACTANTGN NTTATTGGTA AACATTGGCT TGCCTCCCAT GACTTGCCAT 180
 TATAATTAAA ACTGTGACTA CTATCTGTCT CCATTNCATA AA 222

25 SEQ ID NO:1616
 SEQUENCE LENGTH:219
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 30 CLONE:HUMGS01831
 SEQUENCE DESCRIPTION:
 GATCCCNTTC CCACCTCTC TGTGGCCTC AGAGTCACTC CTGCCCCCTC TCCCTGACTT 60
 GGTGCTCACA TGCACCTCAC TAGGGTTTGT GACCAGGGTC TGGATGAGCT TGAATTGAA 120
 35 TGAATTGAGT TTGTATTNT AGAACCTGG GTTTTACAT GTTTGGTCTT TTTTNGTTTT 180
 GGTTTGTAC CNTCGATAAA GGAAGTATAT TCATCCAAA 219

40 SEQ ID NO:1617
 SEQUENCE LENGTH:220
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01832
 SEQUENCE DESCRIPTION:
 45 GATCGCGGCG GANTNGGCC CGCCGCCCTGG TACTCAAGCC CGCGGGGACA TTGGGAAGGG 60
 GACCCCGGCC CCCTGCCCTC CCCTCTCTGC ACCGTACTGT GGAAAAGAAA CACGCACTTA 120
 GTCTCTAAAG AGTTATTTT AAGACGTGTT TGTGTTTGTN TGTGTTTGTN CTTTNNATTG 180
 AATCTATTTA AGTAAAAAAA AAAATTGTTT CTTTATTAAA 220

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EP 0 679 716 A1

SEQ ID NO:1618

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01833

SEQUENCE DESCRIPTION:

GATCANGGCA CTTCAACTCA TTTGGAAAAT NTGAACACTG ATGACATGGT ATAGGAGTGG 60
GNGGGGTGTT GAGCCACCCA TCANACCCTC TTTAGCTGTG CAAGATAAAA GCAGCCTGGG 120
TCACCCAGGG CCACAAGGCC ATGGTTAATT NTTANCGGCA AGGCAAATCC ATNGTTGNGA 180
AGTGCAATGG GCATAGTAAA NGTGCATGAT TTAAAN 216

SEQ ID NO:1619

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01834

SEQUENCE DESCRIPTION:

GATCATAGAA AATAAATAGA AGAGACAGTG AAGCAAGTAA AAAGAAAAGC ATTGTTTTAA 60
TTTGTGTTGCA TTAATTTTTT TCATTGTGCA AAATGCTTCT TTTGTTGCCA CAGTAAAGAA 120
CAGTTTTTAT TGTTTTGTAA GTAAAATTAC GTAGCTGATT TTGTATGTAA AGATTAATTT 180
CCATAATAAA AATTATTGTA TGTTTACTGT GAAA 214

SEQ ID NO:1620

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01835

SEQUENCE DESCRIPTION:

GATCAGAGTG GCCCAGAGAC ATTGCTTTCT TATCACCTAT CATGTGAATT CTACCTGTAT 60
TCCTGGGCTG GACCACTTGA TAACTTCCAG TGTCCTGGCA GCTTTTGGAA TNACAGCAGT 120
GGTATGGGGT TTATNATGCT ATAAAACAAT GTCTGAAAAG TTGCCTAGAA TATATTTTGT 180
TACAAACTTG AAATAAACCA AATTGTATGT TAAA 214

SEQ ID NO:1621

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01836

SEQUENCE DESCRIPTION:

GATCTGTGTC ATAAGTGAAT CCGGATGCAT CAGTGTCAC CAGTTGGAAG CAATGACAAG 60
GATGGCTGGC TGGTGTGTTT CAGCCTTCCG GTTTATAGAC TGTATTTATC TAGTGGATTC 120
CTGCAGGCCC CATACTGAGC CTGGACTGAA AGTATCCACT CGGACCATCT GTTATCTCTC 180
TACACTGAAA ATAAAACCTC TTCCACCCAA A 211

SEQ ID NO:1622

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01837

SEQUENCE DESCRIPTION:

GATCTGAGAT GGAAGAGTTT CATCCCAAAA CCATCTCCCC CTGACCCCCA GTCCATGGAA 60
 AAATTGTCTT CCACAAAACC GGTCCCTGGT GCCAAAAAGG TTGGGGAAC TCTGGTCGGT 120
 ACAAAGTAA TTGTGGTTTT TGCACNGTTG GAATTTGTCA TNTGATATTG GAATACATT 180
 TTAAATAAAT GTGGTTATGT TATACATCAA A 211

SEQ ID NO:1623

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01838

SEQUENCE DESCRIPTION:

GATCAGCGAG GTTCTCCAGG ACCTTAGGTT TGATGCGGAA TCTGCCGAGT GATGGCGGCT 60
 CCCAGGGAT GCCGCCGAGG GAGATGGGAA ACGGGGCGGA TGGCGCCAG CCCAGCCCTA 120
 ACTGCCAGCT GGCTGGGGTC GCGCCCCACT GCGCTGCTGA CCTTCCTGCA GTTCCAGACA 180
 CCTCCACAA TAAAGAGCTC CTCCTCTGTA AA 212

SEQ ID NO:1624

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01839

SEQUENCE DESCRIPTION:

GATCTATGAC AATGTATAGT CAATAAATGA TAGCAATTAT TTTTAATTAT CAAAATAAAT 60
 TGTTAGAGAT TCAAGTTAGC ATACAAAATG GAAATACATT GACAATCTAA AAACATACT 120
 AAAACATAAA CTCAAGACTT TATTCCTCTT CCTGTTCTAT CAAAATTGTG CCAAGTAAAA 180
 AANTAAAANT TGTTCCTTTT ATTTCAAA 208

SEQ ID NO:1625

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01840

SEQUENCE DESCRIPTION:

GATCTAGATG GCAGATAGGA ACTTTNTTGT CACAAAAATA CTGGAGGAAA ATNTTGTA 60
 AATAGACTTT TGGACACACA GCTGTTGGGG CTGCACTGAG CTGCAATTTT TAACATGGAT 120
 TTATAACTTA ATGTTTCTGT TTATAAATA CTAATGATT GCAATGTATT TTAATGGCCA 180
 ATTAACACAG ATGTTTATT CTTTCTGAAA 210

SEQ ID NO:1626

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01841

SEQUENCE DESCRIPTION:

GATCCAGGAT TCTGGGAGGC TTCAGTTACC GCTGGCCGAG CTGAAGAACT GGGTATGAGG 60
CTGGGNCGGG GCTGGAGGTG GCGCCCCCTG GTGGGACAAC AAAGAGGACA CCATTTTCC 120
AGAGCTGCAG AGAGCACCTG GTGGGGAGGA AGAAGTGTA CTCACCAGCC TCTGCTCTTA 180
TCTTTGTAAT AAATGTTAA GCCAGAAA 208

SEQ ID NO:1627

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01842

SEQUENCE DESCRIPTION:

GATCTCACAG CCACGAATTT AGAACTTCCT CCTATAGCAT TTTCTATCTT TTTATGGCA 60
TTTATTTTAT TCTATCTTGT TATGATTACA TAATCTGTTT AATCCCCAAT TATATATTGT 120
AAATACCTTG AAGGAAAGGA GTCTTTATTA TCTTTGGTGC CTGGTGTTTA GTTTAATAT 180
TTTATTAAAT ACATCCAAGG AAA 203

SEQ ID NO:1628

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01843

SEQUENCE DESCRIPTION:

GATCCACTGT TCAATCTGCA CAAGATTNGG GNNCCAGACA TGGGAGACTT CAGCTGCCTC 60
AGAGGACCGT GGACAGGGAA GGCAGCCTCG CATCCCTCTG TCCATGCCTG GNNTGACTTT 120
AATAACCAAG AGTTTTATTT TTGAATTTGT AGCTGTCGTT CACTTTTTAC CCACCCATTC 180
AATAAACCTT ACAGAATTGC AAA 203

SEQ ID NO:1629

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01844

SEQUENCE DESCRIPTION:

GATCCAAGTA ACAGTGACTG CAGTTAGGTG CGAGAGCTTC TCCGAAGCAG CGGTCATGCA 60
GGCTTTTGTG TGGCTGACGC TTCCCTTTTT CACAACAGTA AAAAGCTATC AATGGGAAAT 120
TGTGGACTTT TCCACCCAGG GACTCAATGG GGACTCAATG TGCAATATTC AGTCAACATA 180
AAACTCTTTA AGAACTCCAA A 201

SEQ ID NO:1630

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01845

SEQUENCE DESCRIPTION:

5 GATCACAGAC CACGAGTGCC TTTCCCGGAC CTGGACGTTG CCTCCAGAGC AGGCACCANC 60
 TCTTTCCCTC TCTAGACAGA AATATTTTGG TAAGGTTCTG GGGCAGGGAG GGAGCATGAA 120
 GTACGAGGAA AACTTGAATT CCAGATTTTN AATGCAAAGT ATTTATCATT TCTACCAGAA 180
 ATAAACGTTT TAAGTTTAA A 201

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SEQ ID NO:1631

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01846

SEQUENCE DESCRIPTION:

20 GATCTTGAGG TCACTTCGTT TAGGTCATTN TCTCAACCCA ACCTCCCCAA ACTCTGGTTT 60
 GAGCCAATAT GTGTTCTATT GTTCTCAGAG CACCAGCCGA CTGTACAACA ATTGTTATAA 120
 AAATGTTTAT TGTTACCAA AACCAGTGGA CCTCTTATCA AATGCTGCTT GGTAACAAAA 180
 TCTATCACAG TTTTAATAAA AAGAAAAAAA AAGGAAA 217

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SEQ ID NO:1632

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01847

SEQUENCE DESCRIPTION:

30 GATCTGTTTT NNTTAAACAC TAACAGAATA ATTCTTTATA AATAGGTAAG CCTTACACTT 60
 GTTAAAGAAA TTTACCTCTA ATTTCACTCT CACTAATGTA AAATACTGGG ACTTAAGTAT 120
 ACAATTCAGT CACTAACTGT ACAGTTTTAT GTGGGGAACA ATTATGCAG GCTACTGGAA 180
 AATTAAATCT TATTACCAAA 200

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SEQ ID NO:1633

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01848

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SEQUENCE DESCRIPTION:

45 GATCCNGGGC ATTTNCTCTG GGGAGACAGG CCTGAGGCCA GCTCGGNAGC CAAGCAGATT 60
 CCAAACCACT ACAACCCTTG CCAAACACAG CCCACTCCAT TTANACCGC CTTCTGAGG 120
 AGAAAATGCA GACTCAGGGT TCCAGTAACC AGTGATGGAT TCACCCCATC TCCCAAATAA 180
 TGGTTTACTT GTTTTACAAA 200

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SEQ ID NO:1634

SEQUENCE LENGTH:333

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01849

SEQUENCE DESCRIPTION:

5 GATCTTCTAA GAATTTTGCA AAATTCTAAA CAAATATAGA GATGGTATAT AGAATTCATA 60
 TCTAGAAAAC TTGATTTTA ATGTGAGCTT ATCAAATTG TNCTGGCTTT TTTGGCACTA 120
 AGGCAAAAAC ATGTTAACCA GAAATAATTT ATTCTTCATG TATGTAAAAT ATTTGAGAAT 180
 GTTTAGCCTT TTATTAGAAT TTTATTTGGA AAATATTAT CTTTCTACAC ATTTTACACT 240
 TATGTNCCTT TGCTTATAAC CCAATTTCTT AACTTTTTTG TTAATAAGC AAATATCAAT 300
 10 NATGTTTTAT TATCTAATAA AGTGAAGAT TCN 333

SEQ ID NO:1635

SEQUENCE LENGTH:199

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS01850

SEQUENCE DESCRIPTION:

20 GATCGAATGG CTTTTGCG CTAATACTA TGTGTAGACA GGTTTTATAT TATAAAGTAT 60
 GCATTCTTAT CACCTAGTAT ATAGTTAGTT TGTAGAGTGA TTTCCCCCA GTTTCTTGAA 120
 CATGGTATCT TCACATCTTG GACCTGGTC AGTTGTGCTA TTCATTATTA AACACTAAAA 180
 CTTTGGCGGT TCTTGCAA 199

SEQ ID NO:1636

25 SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01851

SEQUENCE DESCRIPTION:

30 GATCTGGATG TTGAAAAGAG TCTGGCACCT CCTCCNTCTC TCTTGCTCAC ACTCTCACCA 60
 CGTGATATGC TGCCTCCTCC TGTGCCTTCC ACCATGAGTA NAAGCTTCCT TANNTCTTN 120
 TNAGAAGCAG ATGCTGGCAG CATGATTCTT GTACAGTCTG CAGAACAGTG AGCCAAATAA 180
 ACCTCTTTTC TCTAAA 196

35 SEQ ID NO:1637

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS01852

SEQUENCE DESCRIPTION:

45 GATCCAAGTA TTTCTNCATC AAGCAGTTTT TAAAAGGAAA ACGATAATAA TCAGTAGGCT 60
 CCATGGAAGC CTTNCCTTA ATAGCTATGT GCCAAATACT TTNATCTNGT GTGACAGTCA 120
 TGTCAGAGTG AAATCTCTCA GGAAAAGTGT AACTAGTAGT TACAAAGTAA ATAAAGGATT 180
 TCATTTTAAG GTGAAA 196

50 SEQ ID NO:1638

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01853

SEQUENCE DESCRIPTION:

GATCCTCCTG CAGGGCTAGG CGGATTGTTT TGGATTTCCT TTTGTTTTTC CTTTtagTTT 60
TCCATCTTTT CCTCCCTGG TGCTCATTGG AATCTGAGTA GAGTCTGGG GAGGGTCCCC 120
ACCTTCCTGT ACCTCCTCCC CACAGCTTGC TTTTGTGTA CCGTCTTTCA ATAAAAAGAA 180
GCTGTTTGGT CTAAA 195

SEQ ID NO:1639

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01854

SEQUENCE DESCRIPTION:

GATCTTAGCT TTGATAAATG ACTGANGCTG GAGAAGCCGT GGTGAAGTC AGCCTACACT 60
ACAGTGACACA GTTGAGGAGC CAGAGACTTC TTAATCATC CTTAGAACCG TGACCATAGC 120
AGTATATATT TCCCTCTTGG AACAAAAAAC TATTTTCCT GTATTTTAC CATATAAAGT 180
ATTTAAAAAA CAAA 194

SEQ ID NO:1640

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01855

SEQUENCE DESCRIPTION:

GATCTGAGTA ATTAGCAGGT ATGATGCTGG GACTGGAAAA TAGAAAGTAA TAACTAAAGG 60
GTTAATGTGC AACGTTATTT TTTGGCCTTG TTCATAATTT TATGTTTTCA GTGGCNTGTG 120
TACATATAGA ATTGTTAAAG TTGTCATTC CAATATTTAT ATTAGAAAAA TTATTTAGAT 180
ACTTTATAAT TTTAACCAGC ATTTTAAATA ATGACACTTG CATTTATTGT ATTGTAATAA 240
ATTTCACTTT TAACTTTAAA AGTTTAAA 268

SEQ ID NO:1641

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01856

SEQUENCE DESCRIPTION:

GATCTCTGCT CAGAGAAGTG CAGGGGGAGC CTTCCAGCTC ACTCTCCCTG AGGACTGGCT 60
TGACAGGGGC TATGGGTTTG CTTTGGTGT GTTTTAAAA AAAGAAAATA TATTTTTTTG 120
AAAAAACGAC TGCCCATCCC GGGTCCTTC CCTGATGGGT TGGGGCAGTT ACCTGGTTGC 180
TGTTTAAATT AAA 193

SEQ ID NO:1642

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01857

SEQUENCE DESCRIPTION:

GATCACATCA CTCCACCCCT GCCAGGCCCC AGGTTAGGAA TAGTGGTGGG AGGAAGGGGA 60
 AAGGGCTGGG CTCACCGCT CCCAGCAACT GAAAGGACAA CACTATCTGG AGCCACCCAC 120
 TGAAAGGGCT GCAGGCATGG GCTGTACCCA AGCTGATTTC TCATCTGGTC AATAAAGCTG 180
 TTTAGACCAG AAA 193

SEQ ID NO:1643

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01858

SEQUENCE DESCRIPTION:

GATCCTTAGT ACAACATGTG AAAGAAGATA TGTGTCTTT ACTCACAGTG GAGGCATTTT 60
 TCTAGCTGTG TTTGATTGG-CTTCCCTATA GATTCAGGAC CCATAACTCT TGTCTCACT 120
 CATCTGCTAT GCTGCTGATA AGGACTTTCA GGTCAACAGC TGTAAGTCT AAATGAAGTT 180
 AATACTCTGG AAA 193

SEQ ID NO:1644

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01859

SEQUENCE DESCRIPTION:

GATCTAGGCA AACCTTTATA AAGTTGCAGT ACCTAATCTG TTATCCCAC TTCTCTGTTA 60
 TTTTGTGTG TCTTTTTTAA TATATAATAT ATATCAAGAT TTTCAAATTA TTTAGAAGCA 120
 GATTNCTCG TAGAAAACT AATTTNCTG CCTTTACCA AAAATAAACT CTTGGGGGAA 180
 GAAAAGTGGA AA 192

SEQ ID NO:1645

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01860

SEQUENCE DESCRIPTION:

GATCTGTCTG TTGCTTGTTT AATATATTTT TTTATGACA TTACTTAAAG TTAAAAAGGG 60
 TTTTNTATCC ACTGTCAATT TCAATTGGAT AACATTTTGT CAAGNTTTTT TTTTCCTGAT 120
 TATTTGATGC TAGCTGGAAT TCAAGAAATG GCATTGACCT TATTCAAATA AAGAAATATT 180
 TTAGTAAA 188

SEQ ID NO:1646

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01861

SEQUENCE DESCRIPTION:

5 GATCAAAAAC TAATTTGGGA TATGTATGGG TAGGGTAAAT CAGTAAGAGG TGTATTTTGG 60
AACCTTGTTT TGGACAGTTT ACCAGTTGCC TTTTATCCCA AAGTTGTTGT AACCTGCTGT 120
GATACGATGC TTCAAGAGAA AATGCGGTTA TAAAAAATGG TTCAGAATTA AACTTTAAAT 180
TCATTCGAAA 190

SEQ ID NO:1647

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SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01862

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SEQUENCE DESCRIPTION:

GATCAGTTGG GTGCTATGTG CTCAGCTTTC CTAAGTCAGC TTCATTTAAT GCAGAGTGGT 60
GTTTGAATTT GGCTTAGATG GGCTGGCAGG CATGATTTTA AAAAATGTAA TCATCAGTAA 120
GAAGTACTTC CATGTAAAG ATGCAAAAAA AAAAGTCTTC ATTAAAAATT CTATTAAANG 180
AAA 183

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SEQ ID NO:1648

SEQUENCE LENGTH:361

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01863

SEQUENCE DESCRIPTION:

30 GATCCAAACA AATACACATT CTGTNTTTTA GCTCAGTGTT TTCTAAAAAA AGAAACTGCC 60
ACACAGCAAA AAATTGTTTA CTTTGTGGA CAAACCAAT CAGTTCTCAA AAAATNACCG 120
GTGCTTATAA AAAGTTATAA ATATCGAGTA GCTCTAAAC AAACCACCTG ACCAAGAGGG 180
AAGTGAGCTT GTGCTTAGTA TTTACATTGG ATGCCAGTTT TGTAATCACT GACTTATGTG 240
CAAACTGGTG CAGAAATTCT ATAACTCTT TGCTGTTTTT GATACCTGCT TTTNGTTTCA 300
TTTTGTTTTG TTTTGTAATA ATGGTAAANC TTCAGAAAAT AAAATGTCAG TGTTGNNTAA 360
A 361

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SEQ ID NO:1649

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01864

SEQUENCE DESCRIPTION:

45 GATCAGGACC TGGGGGCCTA CAGTTCTGCC AGGAAGTGCC TGGCCAAACA GAGGCAGAGG 60
ATGCTGCAAG AGAGAAAAGC TGCAAAANAG GCCGCCGCTG CCACCTCCTG AGGCAGNTGT 120
GGGTGCCCT GCTGTGTGCG TCTGTATGAC TGTTGCTGAA ATATAAGCC CTGCAACCTG 180
AAA 183

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SEQ ID NO:1650

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SEQUENCE LENGTH:178

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01865

SEQUENCE DESCRIPTION:

GATCTCAGCA CAAGCAGGGG AGCAGCTGGG GGAACACAGC TTTATGTAAT TACCTCTGTT 60
CAATATTTAG CAAGTTGCAT TGTAACATTG TAACTGTTTG TTTCTCCTTG GATGATGAGC 120
TACCCCAAG AAGGGGTCAT ATCAGATTGG GTCTCATTAA AATGTCTGAT GAATGAAA 178

SEQ ID NO:1651

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01866

SEQUENCE DESCRIPTION:

GATCTATGGC TTAATAAATT TGTTCCTGTG ACAATNTTTG TAAATCTAGC CAATAGAGTC 60
ATTTACAGAA GAAAAATNAG CATGTAATAA TACAAGAACT GTTCCCCCT CAAAACCTGA 120
ACCTGAATTA TTTGTAAAA CTGAAATTA ATGATTAAAG AGAAGCCAGA ATTGTAAA 178

SEQ ID NO:1652

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01867

SEQUENCE DESCRIPTION:

GATCTGGAGC TAATAATGAC TGAGATGGAG ATATCTCGAG CAGCAGCAGA ACGCAGTTTG 60
CGGGAACACA TGGGCAACGT GGTAGAGGCG CTTATTGCCC TAACCAACTG ATGCGTGCTT 120
TCTCAAATAT ACCTACTGGA TTAATTTATG GCAATAAAAT TTTTTTTGT CTTTTTCAGT 180
TTTATCAAA 189

SEQ ID NO:1653

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01868

SEQUENCE DESCRIPTION:

GATCTCTGCT CTGCCCTCTC CCAGATTGGT GGGGAGGGAG GGCGGGAGGT AGATATAGGC 60
CTGTCTTTT TAGCAATGTG ATTCTTGTG TTGATTCTCT CTCTGGAGTT CATGTGCTGC 120
CTCANNGAC TCTGATTTA TATTTNAGAA AAATAAAGGC GTTCAATCTG CAAA 174

SEQ ID NO:1654

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01869

SEQUENCE DESCRIPTION:

GATCAGGCTC ATCTCATCTG CACCAACTGC TCTACCTGTT AGATGGAGAC CTGTCNTCAT 60
 GAATTTCTCG AAATGCTCCT GGAACCTATT TATATGCCTC AAAATCCTCT AAACCTATTT 120
 ATAGTAACCC ATAGTTTAA TTTTATAAAT AAACGTATTT ATTAAATCTT AAA 173

SEQ ID NO:1655
 SEQUENCE LENGTH:172
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS01870

SEQUENCE DESCRIPTION:

GATCTCTAAT TTAAAGAAAC AGTTTTTATA TACCTAGAAT GAAGATTCTG TTAAAGCGG 60
 TTTTGGTTAA CTTGGTTCTT GACATTTGCC TAAATNTTN TTGGATTGGG ACTAAAATGT 120
 NCTATTAGCC AATGAATAAC GTCCAAGTAA ATTTNTGTTT TATTTGGGA AA 172

SEQ ID NO:1656
 SEQUENCE LENGTH:171
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS01871

SEQUENCE DESCRIPTION:

GATCTCAAAG GAGTCTGAAA TATCATATTT CTGTGTGTGT CTCTCTCAGC CCCTGCCCG 60
 GCTAGAGGGA AACAGCTACT GATAATCGAA AACTGCTGTT TGTGGCAGGA ACCCCTGGCT 120
 GTGCAAATAA ATGGGGCTGA GGCCCTGTG TGATATTGAA AGGGTAAGAA A 171

SEQ ID NO:1657
 SEQUENCE LENGTH:171
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS01872

SEQUENCE DESCRIPTION:

GATCGNCATT ATCCCCAGNA AAAAGCTCCG CAACAAGATA GCAGNTAATG TCACGCATCT 60
 GATGAAGCGA ATTCAGAGAG GCCCAGTAAG AGGTATCTCC ATCAAGCTGA NCGAGGAGGA 120
 GAGAGAAAAG AGAGACAATT ATGTTCTGA GGTCTCAGCC TTGGNNCCNN N 171

SEQ ID NO:1658
 SEQUENCE LENGTH:171
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS01873

SEQUENCE DESCRIPTION:

GATCAAAGAC ATCCTCATCC AGTATGACCG GACCNCTGG TAGCTGACCC TCGTCGNTGC 60
 GAGTCCAAA AGTTNGGAGT CCTGTGCCC AGTTCGTACC AGAATCCACC GTAAGCCATC 120
 GGNCTAAAC TTACTTNATA ATAACAGTTT TGAGGGATT AAAAGTTCAA A 171

SEQ ID NO:1659

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01874

SEQUENCE DESCRIPTION:

GATCAAAAAT CCAAGGAGAA TGGTGCCAGT GTATGATAAA ATCCATGTAG TGATGAGGAA 60
TGGTGTAAAA TAATGTAATA TATAANANTC ATGATATANG ANTGTTTGAA GGTGATGCAT 120
GTTTGATTTT NGTAGTATAA NTGTATTNA GTTCAAATGA TGTATAANGN 170

SEQ ID NO:1660

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01875

SEQUENCE DESCRIPTION:

GATCCTCGCT CCGTTGCACG GCGCCNTAA GTTATTGGAC TATCTAATAT CTATGTATTT 60
ATNTCGCTGG TTCCTTGTAG TCACATATTT AATAGTCTTA ATATCTTGT TTTGCATCAC 120
TGTGCCCAT T GCAAATAAAT CACTTGGCCA GTTGTCTTTT CTACAAA 167

SEQ ID NO:1661

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01876

SEQUENCE DESCRIPTION:

GATCTGGGCG ATTCTGAAGC CATGCCATTT TTAACCTTAT GTCTGCTAGA AAGTGTGTGA 60
GTTGATTGAC CAAACCAGTT CATAAGGGGA ATTTTTTTTA AAAACAACA AAAAAAAAC 120
CATCCAAGN NGGGTTTNTG ATTAAATTTT GTGGNGTTAC CAGTAAA 167

SEQ ID NO:1662

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01877

SEQUENCE DESCRIPTION:

GATCTTCCCC AAGAGGGACT GGGGTTTCTG GGGTCCATTC TCTGAGTCAG TGGTTATTTG 60
AAAATTTGAT TTGATTTTA TTTTCTCT GTAAACTTCC AAGCTGGCTT TTCCCATTTT 120
AATTCCTGTG ATTTATGCCA ATAAAGTTTG CCCATGATT TCAAA 165

SEQ ID NO:1663

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01878

SEQUENCE DESCRIPTION:

GATCCCTNCC TTGGTGGGCA GTTCTGCCTT CCAAGGAAGA AGGGGAAGAA AAGGACCTGT 60
 GGGTGGCTCA GGNCNAAGCA GACCCCGGGC TCCACCCAG CCCCAGCCAG GNTGCTGCCA 120
 GTNCACACTT TTACAAATTT AATATAAAGC AAGTCCAGTN TTAAA 165

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SEQ ID NO:1664
 SEQUENCE LENGTH:161
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01880

SEQUENCE DESCRIPTION:

GATCAGGCTG CTGAGGGAAT AAATTTAATC AAGGTCTTTG CAAAACAGA AGCACAGAAG 60
 GGAGCCTATA TAGAACTAAC ACTGCAGACT TATCAAGAAG CACTCAGTCG CCATTCTGCA 120
 GCTTCCTAAA AATATTTTAA AAATACATTT ATTTTACTAA A 161

15

SEQ ID NO:1665
 SEQUENCE LENGTH:158
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01881

SEQUENCE DESCRIPTION:

GATCAGTCCA TCCCAGAGGG ACCGGAGTTA TGACAAGCTT TCCAAATATT TGCTTTATC 60
 AGCCGATATC AACACTTGTA TCTGGCCTCT GTGCCCCAGC AGTGCCTTGT GCAATGTGAA 120
 TGTGCGCGTC TCTGCTAAAC CACCATTTTA TTTGAAA 158

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SEQ ID NO:1666
 SEQUENCE LENGTH:158
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

30

CLONE:HUMGS01882

SEQUENCE DESCRIPTION:

GATCGTGTAT TGAGATTCTT TAAATAATGC TTCAGATATT ATTGCTTTAT TGCTTTTTTG 60
 TATTGGTTAA AACTGTACAT TTAATAATGC TATGTTACTA TTTTNTACAA TTAATAGTTT 120
 GTCTATTTTA AAATAAATTA GTTGTTAAGA GTCTTAAA 158

35

SEQ ID NO:1667
 SEQUENCE LENGTH:155
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01883

SEQUENCE DESCRIPTION:

GATCTTTGTT AGTTGCATAT TATATTTTCA GTTTTATCTT CTTGGTGAAT TGACCCTTTT 60
 ATCATTATGT AATCCCCTA TATTTATATC TTTATATTTA ANATAGGTTT CCTTAACATT 120
 TGAGAAGTAA AANTAAAATA AAATGTAATA GCAAA 155

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SEQ ID NO:1668

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SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01884

SEQUENCE DESCRIPTION:

GATCACTCTG GGCTCACTTG CCTGCCTAAT GGTCATCTCC CCAGTAGACT GTAAGCTCCT 60
TGAGGGCAAG GATTGTGTTG GAATTTTGTG ATTAACAGTG CCTGGCTTGG TGCCTGGCAC 120
CTAGAAAGCA CTCATAAAT GTTTGTTTAA TGAAA 155

SEQ ID NO:1669

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01885

SEQUENCE DESCRIPTION:

GATCAGATGC TTGAAATTTA ACACTTTTCA CTTGGTTCTT ATACTGAATG CCGACTCTGC 60
TCTGTGTTAG AGATATGAAA TGGTGTGTTGA TACTGTTTGA GACATTATGG AGAGATTTAA 120
TTATTTGTAA TAAANGNTTT GCTGCAGTCT GAAAACTGAA A 161

SEQ ID NO:1670

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01886

SEQUENCE DESCRIPTION:

GATCTATTGT AATGTGTTAT TTNGGCTGAN GTATGTNAAG AAAATACTAC CTTACAAAGN 60
TATGTATTNT CAAAAGGAAA TACATATCAG AAAGTTTAAAC AGGGCCAGTG GGTGATACTG 120
AAGTTGTCGG GATGGATGGT GTCTATCTGG NNN 153

SEQ ID NO:1671

SEQUENCE LENGTH:444

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01887

SEQUENCE DESCRIPTION:

GATCTAGAAG TTTTACTTTT ATAAAGATGG TGTCCGGAAG ATGTTGCTAA TGTATTTTAC 60
TTCAACATAG GGAACAAACT TTTTAAGTAT ATTAATAAAC CTGTATGGTT AGTTTTTAAC 120
AGTTTTTTAA AATAAACTAT GGATATGACA AATATTCTGT GTTTTACTAA GTGCTTGGAT 180
AGGCTTTCTA ATTTNGTATA CGTGCTAGAG TTAATTATG ANCATTTTAA TCCAAATTTA 240
GTTGTAAC TC TTTTATACT ACTGATTGCT CATTGTTTA AATGATATTN TNNNGTAAAA 300
GTCATAACCA ACATATGANC AGACAGATTT ATGCTTTTAA ACACAGATTG TNAGCTATAG 360
GTTTAATCTG ATACCAGTTG CTGGAAGGTT GCCATTTGGT TTTTCTNAAA ACCTATACCN 420
CTAAAAC TTTTNAAGGT TAAA 444

SEQ ID NO:1672

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01888

SEQUENCE DESCRIPTION:

GATCAGCAGC CCTCGCAATG TGCTCAGCGA GTACCAGCAG AGGCCGCAGC GGCTGGTGAG 60
 CTACTTCATC AAGAAGAACT GAGCAAGGCC TGAGCGCTGC CTGAACTCCG AAGNCCTGTG 120
 TGATGCTTTC CATTAAAAAN NATTGTCCAA A 151

SEQ ID NO:1673

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01889

SEQUENCE DESCRIPTION:

GATCCAGATG ATAAACCACT GAACTATGTC AAAAGCACTC TCAATATTAC ATTTGACAAA 60
 AAGTTTTGTA CTTNCACAT AGCTTGTTC CCCGTAAAAG GGTTAACAGC ACAATTTTTT 120
 AAAAATAAAT TAAGANGTAT TTATNGGAAA 150

SEQ ID NO:1674

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01890

SEQUENCE DESCRIPTION:

GATCCGNCCT TCTCTGCCTT CCAAAGTGCT GGGATTACAG GCGTGAGCAC ATCTGCCCGG 60
 CTTATTTTTC TTTATGTTT TNCTTCGTAA GAGGTCTGT TGAGCAGTGA TTGCAACTC 120
 TTGCTGACGT TGCTGGGGAA GCTTTAAA 148

SEQ ID NO:1675

SEQUENCE LENGTH:568

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01891

SEQUENCE DESCRIPTION:

GATCTACCCC AGGGAGAATC TGAGACATCT TGCCTACTTT TCTTATTAG CTTTCTCCTC 60
 ATTCAATTCT TTTATACCTT TCCTTTTGG GGAGTTGTTA TGCCATGATT TTTGGTATTT 120
 ATGTAAAAGG ATTATTACTA ATTCTATTTT TCTATGTTTA TTCTAGTTAA GGAAATGTTG 180
 AGGGCAAGCC ACCAAATTAC CTAGGCTGAG GTTAGAGAGA TTGGCCAGCA AAAACTGTGG 240
 GAAGATGAAC TTTGTCATTA TGATTTTATT ATCAGATGAT TATAGAAGGC TGTCTTAGTG 300
 CAAAAAACAT ACTTACATTT CAGACATATC CAAAGGGAAT ACTCACATTT TGTAAAGAAG 360
 TTGAACTATG ACTGGAGTAA ACCATGTATT CCCTTATCTT TTAATTTTTT TCTGTGACAT 420
 TTATGGTCTC ATGTAATTTG CATTACTCTG GTGGATTGTN CTAGTACTGT ATTGGGCTTC 480
 TCGGTAATAG GTTATTTCCA TATACTATAA TTGGNAATAT TTTTGTACCA ATGGTTATAA 540
 CNCTAGGGGT NTAAAAACCA GGTTCCTGN 568

SEQ ID NO:1676
 SEQUENCE LENGTH:146
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01892
 SEQUENCE DESCRIPTION:
 GATCTCTAAG GTATTATGTT TGCCTTCTCT TAGTTATTTT TGGGTTGTCA CAAAGCTCAG 60
 TATCATGGTT TGACAGAAGC AGTTATGTGA ACTTTTATGT TAGGACATTA CTAAATAAAG 120
 AATTCCTAG CTGCTTATAA AGTAAA 146

SEQ ID NO:1677
 SEQUENCE LENGTH:144
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01893
 SEQUENCE DESCRIPTION:
 GATCCATTCT CCNTTANTT CCCCCACCCT CCTCTCTNGG ATATGGTTGG NTTTGGCTCA 60
 TTTCACAATC AGCCCAAGGC TGGGAAAGCT GGAATGGGAT GGAACCCCT CCGCCGTGCA 120
 TCTNAATTTN AGGGGTCATG CNCN 144

SEQ ID NO:1678
 SEQUENCE LENGTH:151
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01895
 SEQUENCE DESCRIPTION:
 GATCGAGATG AGCTTTAAAA ACTTGAAAAA CAGTTTGTA GCCTTTCAAC AGCAGCATCA 60
 ACCTACGTGG TGGAAATAGT AAACCTATAT TTTCATAATT CTATGTGTAT TTTATTTTG 120
 AATAAACAGA AAGAAATTTT GGGTTTTTAA A 151

SEQ ID NO:1679
 SEQUENCE LENGTH:140
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01896
 SEQUENCE DESCRIPTION:
 GATCTTGATG GTCGCTGCAG AGTAACTTCA GCGCTGAGTT CGTTTGAAAC CTTCGGTTTG 60
 TTAAGATTCA GAATAACCA TGGCTTTGTC TGTAAATCT CCCGATTCT GTTAGGAAAA 120
 TAAAAGCCTC ATTTCTTAAA 140

SEQ ID NO:1680
 SEQUENCE LENGTH:139
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS01897

SEQUENCE DESCRIPTION:

GATCACTATG TAGGCAATGC TGGATACTGG NCTGTTATTT ACACATTGT ATCACCTTTT 60
 ATTCATAAG ATAGCATTGT CAGANTAATT TAGTATTCA ACATAATCAA CAAGTAAAT 120
 AAAATTAATG AGAATGAAA 139

SEQ ID NO:1681

SEQUENCE LENGTH:139

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01898

SEQUENCE DESCRIPTION:

GATCTCCACA TTCAGGTTTC CTGATGCACT TTNCGACTCT TTGGGCAACC TCTGGACTCC 60
 TTGTNCCCAG GGTCCACATT TAGTTTTATC TTTACTGCAT TGCTTTTATG AAAAGAATA 120
 AAATTGGATG AAACAGAAA 139

SEQ ID NO:1682

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01899

SEQUENCE DESCRIPTION:

GATCAGTTAA TTTGTATGTA GCAGTGATG CTCTCATATA CAATNACTGA CCTATGCTCT 60
 AAAACATGAA TGCTTTGTTA CAGACCCAAG CTGTCCATTT CTGTGATGGG TTTTGAATAA 120
 AGTATTCCTT GTCTTAAATG AAA 143

SEQ ID NO:1683

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01900

SEQUENCE DESCRIPTION:

GATCGAATCA CCTGAATGTT CTATGTANTG TAAAATATTC TTTTCTTGCT TTCTTGTT 60
 AAGGTATATA TTCTATTTGT ATGGAATTCT TATTCAAATA CAGTTCTATT AAAGAGTATA 120
 CTCCTATTGG ATGAAA 136

SEQ ID NO:1684

SEQUENCE LENGTH:136

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01901

SEQUENCE DESCRIPTION:

GATCTCAGCG GCATTAAAGCT GTGCCTGAGC GAGTTTGTAG TGA CTCACTG CACAGCACCN 60
 CCAGACTAGC ATGTGGTTCT ATATTGTAA AGTTATTGGG ATAAGAAACA ATTAACAGT 120
 TTGTAGTAAA CACAAA 136

5 SEQ ID NO:1685
 SEQUENCE LENGTH:136
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01902
 SEQUENCE DESCRIPTION:
 10 GATCTTCTAC TTCCCTNTGG GGAGGGGAGT GACAGGTCCA CACACCACAC TGGGTCACCC 60
 TGTCTGGAT GCCTCTGAAG AGAGGGACAG ACCGTCAGAA ACTGGAGAGT TTCTATTAAA 120
 GGTCATTAA ACCAAA 136

15 SEQ ID NO:1686
 SEQUENCE LENGTH:135
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01903
 SEQUENCE DESCRIPTION:
 20 GATCTTTAAA AAAATTTTCC ATATGTCAAA GTGTAGAGAT GTTTCTAGCA GCATTTATCT 60
 TGTCTCTAT AGATTGAACA AAAAGTGTA GCTGTNAAAT TGTGATTTAT AATAAATACA 120
 TATTTGGTCT TCAAA 135

25 SEQ ID NO:1687
 SEQUENCE LENGTH:135
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01904
 SEQUENCE DESCRIPTION:
 30 GATCAGCAGT TCCAGCCCCT ACGCTNGCTG GGGGCGCAAC CACCCCTTCC TTAGGTTGAT 60
 GTGCTTGNA AAGCTCCCTC CCCCTCCTC CCAAGAGAG GAAATAAAG CCACCTTCGC 120
 CCTAGGGCCA AGAAA 135

35 SEQ ID NO:1688
 SEQUENCE LENGTH:136
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS01905
 SEQUENCE DESCRIPTION:
 40 GATCTTCATC TGTAGCCAAG AAGAGAGCAT TAAACCCAAG ANCATTGTGG AGAAGATTGA 60
 CTTTGACAGT GTGTCCAGCA TCATGGCCTC CTCCAGTAA CTTCAGGTGT TTAATAAAGA 120
 TGTGTTGACT CAGAAA 136

45 SEQ ID NO:1689
 SEQUENCE LENGTH:134
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
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CLONE:HUMGS01906

SEQUENCE DESCRIPTION:

GATCTTAATG TTTCAAAGGA GTGCAGCCCT TCACAGCCAT CAGATATGAG GGCAGTGTTC 60
 TGTCTGGTGT TGTAGCCATC TCAAGAACAA ATCAACAGCA ACAAAGAGA AAGAATAAAT 120
 TTTTAAATT TAAA 134

SEQ ID NO:1690

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01907

SEQUENCE DESCRIPTION:

GATCTGTGAC CCTGGGCGCT GAAAATGGGA CCCAGGAATC CCCCCGTCA ATATCTTGGC 60
 CTCAGATGGC TCCCAAGGT CATTCAATC TCGGTTTGAG CTCATATCTT ATAATAACAC 120
 AAAGTAGCCA CAAA 134

SEQ ID NO:1691

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01908

SEQUENCE DESCRIPTION:

GATCTCTACT ACCACAAGGA AAATAGTTTA GGAGAAACCA GCTTTTACTG TTTTNAAAA 60
 ATTACAGCTT CACCCTGTCA AGTTAACAAG GAATGCCTGT GCCAATAAAA GGTTTCTCCA 120
 ACTTGAAGTC TAAA 134

SEQ ID NO:1692

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01909

SEQUENCE DESCRIPTION:

GATCAGTGTG GAGGACCCGC CCCAGCGCAC GGCCGGCGTC AAGGTGGAGA CCACTGAGGA 60
 CCTGGTGGCC AAGCTGAAGG AGATTGGCG GATTGAGCC CCTCCAGAG ATGGCAATAA 120
 AACTGACTCT CAACATCAAA 140

SEQ ID NO:1693

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01910

SEQUENCE DESCRIPTION:

GATCTAACCT TTGANGCTTT AAAAAAGGAG AAAGAGGGTA GGGGTGGGAA ACTGGCATAC 60
 TGTGTGTATA GCACTGCCGA TTGGCTAGGC CACTGTGTCT CTGTACAAA TTAAGAAAT 120
 CCTAAAAGTT AAA 133

5 SEQ ID NO:1694
SEQUENCE LENGTH:133
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01911
SEQUENCE DESCRIPTION:
GATCGCGAAT AAAAATCAAC AAATGTGAAA GCCCAGAAAA ATATATTCGT ATTTCTGGTT 60
10 TTGCTGGATT TTTACATTTT TATATAATAA AAATGNTATT TTGAAATAAA GATTATGCTG 120
ACTCAAATGC AAA 133

15 SEQ ID NO:1695
SEQUENCE LENGTH:131
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01912
SEQUENCE DESCRIPTION:
20 GATCTATTGC AGATATTTGA TGTAGTTTTC TCTTTTAAAT TAATCAGAAA CCCCACTTCC 60
ATTGTATTGT CTGACACATG CTCTCAATAT ATAATAAATG GGAAATGTCG ATTTTCAATA 120
ATAGACTTAA A 131

25 SEQ ID NO:1696
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01913
SEQUENCE DESCRIPTION:
30 GATCCGCCCG GCTCAGCAGA ATTCACGCTC CTGTATGCCT CAGCCCCTCG ATATAACTCC 60
ATCGGATTCT AGCAGCCTGG TATTCTAGCA ATAAAACCCA AGGCCTGAGA AACAGGGGCC 120
ATCCTGCAAA 130

35 SEQ ID NO:1697
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01914
40 SEQUENCE DESCRIPTION:
GATCAGACTG TCACTTTATA GTTTTCTAT ATAAAGATTA TATAGTTGCA AACAAAGGTT 60
GTGAAATTC CCTTTGTTG TTTTNACTT TTAATTAATA AAAGTACATT GTTTTCATAG 120
CAAACTTAAA 130

45 SEQ ID NO:1698
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
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CLONE:HUMGS01915

SEQUENCE DESCRIPTION:

5 GATCGAAGCT ACCGTAATGT GTTCTTGAGG TCAACATGTT TTGTGGAAGT CACTGTATTT 60
 GCCCCNTTAT GTCAATTACC TATTATAAAC CGAGAGAAAT GGGAAAATTA AAAACCTGTT 120
 TTGAATTAAA 130

SEQ ID NO:1699

SEQUENCE LENGTH:129

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01916

SEQUENCE DESCRIPTION:

15 GATCCCTTGT AAACATGAAA TCATTCCATG GATGGCTGCC TTATAATTTT GTCTCTTTCC 60
 ACTTTAATTG TGAATGGTTA AAAAAATGCT GTTTTCTGAT ATTAAATTTT TATTAGTGCA 120
 TACCTTAAA 129

SEQ ID NO:1700

20 SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01917

25 SEQUENCE DESCRIPTION:

GATCTGTACC TAGTACCCCT CCCATCTACT GATTTGTTTG TTTTGTAAAC CAAACACATT 60
 TTCAGATAGA AGGAGCCTTA AA 82

SEQ ID NO:1701

30 SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01918

35 SEQUENCE DESCRIPTION:

GATCCCTAT TCCCTCCACA ATAACAGAAA CACTCCCAGG GACTCTGGGG AGAGGCTGAG 60
 GACAAATACC TGCTGTCACT CCAGAGGACA TTTTTTTAG CAATAAAATT GAGTGTCAAC 120
 TATTTAAA 128

40 SEQ ID NO:1702

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01919

45 SEQUENCE DESCRIPTION:

50 GATCTACAAAT NAAGCCCTCA AGGGCTGAAA ATAAATAGGG AAGATGGAGA CACCCTCTGG 60
 GGGTCCTCTC TGAGTCAAAT CCAGTGGTGG GTAATTGTAC AATAAATTTT TTTTGGTCAA 120
 ATTTAAAAAA AAATAAA 137

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EP 0 679 716 A1

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SEQ ID NO:1703
SEQUENCE LENGTH:128
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01920
SEQUENCE DESCRIPTION:
GATCTGAGGA GGAAATGTGA CGCCGGACGC TTCNTGTNT TTGACCTTTT NAAAGGANGA 60
GGAAGTTCAC CGACANTACC CATCACCCAC AAAAGTCTCA CTTCTTGGAA GATTGTGTGT 120
AGGCTGNN 128

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SEQ ID NO:1704
SEQUENCE LENGTH:127
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01921
SEQUENCE DESCRIPTION:
GATCTGGCGT NCTACTATGA GGCTTCTTTT GACCTCATTN NTGTGGTNGC CGGCGTAGCC 60
AGACCATCCT ATACTGTGAC TACTTCTACT NGTACATTAC AAAAGTACTC AAGGGAAAGA 120
AGCTCNN 127

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SEQ ID NO:1705
SEQUENCE LENGTH:146
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01922
SEQUENCE DESCRIPTION:
GATCATAGCT AACTGTATG TTTAGGTGGT GTGAAATNAT TTATAATCAC AGCTTGAAC 60
GTGTTTGCTT GGTACTGTCA TAGTGATTAC AAATTTATG GAATGCGAAG AGCAACAATA 120
AATAAAAAAT ACCACTCACC CTCAAA 146

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SEQ ID NO:1706
SEQUENCE LENGTH:240
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01923
SEQUENCE DESCRIPTION:
GATCAAAAAG GACTGAACCC CCACTATCAT AATCCATACA TTCATTCCA TGTGTGTTGA 60
CTAGCAGTGC ATATATGAAT GAATATGGTA ATTAATCTTA CCTATAAGAA CCAAATACTT 120
TAATTATATT AAGATAGTGA ATAAAGATGT ATAATATTTT NATTAATACC TTGAATATAT 180
TCAGTGGATT GAATGTGACT TCATAACTGT ACTACGATTG TATTAAAATA TTTCTGGAAA 240

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SEQ ID NO:1707
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS01924

SEQUENCE DESCRIPTION:

5 GATCTTATGA AGGAAGATTT GTGACCCTAC GTATATATAT ACACACACAT ACATATATAT 60
ATATATCCCG AACCAACANC GGGACTTTGT TTATATTGCA AATAAATATT ATTTTCCTT 120
TAAA 124

SEQ ID NO:1708

SEQUENCE LENGTH:124

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01925

SEQUENCE DESCRIPTION:

15 GATCCCCTTT CTCTATGTCG GGACACTCAT TAGCAAGAAC TTTNCTGCTC TACTNGAGGN 60
ACATGACATT TTTGTTCCAG AGGATGATGA TGATGATGAC TAACAGGAAT TACAGAANGN 120
NGAN 124

SEQ ID NO:1709

20 SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01926

25 SEQUENCE DESCRIPTION:

GATCCGAGCA GTCCTCTGCC CGCCTCCCGT GAAGAAGAGG AAGAGAAAAT GCCTGCTGTT 60
GTAAATGTCT CAGCCCCTCG TTCTTGGTCC TGTCCTTGG AACCTTTGTA CGCTTTGCTC 120
AAAAAAAAAC AAAAAAAAAA AACAAA 146

SEQ ID NO:1710

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS01927

SEQUENCE DESCRIPTION:

GATCCTGTGT AGAAGCTGTT CTCATTAAAC ACCAAACAGT TAAGTCCATT CTCTGGTACT 60
AGCTACAAAT TCGGTTTCAT ATTCTACTTA ACAATTTAAA TAACTGAAA TATTCTAAA 120

SEQ ID NO:1711

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45 CLONE:HUMGS01928

SEQUENCE DESCRIPTION:

40 GATCTGCGCC TCTCAGTGCC TTTGAGGGG TTCCCATCAT CCTCCCTGA TATTGTATTG 60
AAAATATTAT GCACACTGTT CATGCTTCTA CTAATCAATA AACGCTTTAT TTAAAGCCAA 120
A 121

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EP 0 679 716 A1

SEQ ID NO:1712

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01929

SEQUENCE DESCRIPTION:

GATCGGGGCA AGAGAAGGCT GAGTACGGAT GGGAACTAT TGTGCACAAG TCTTCCAGA 60
GGAGTTTCTT AATNAGATAT TTGTATTAT TTCCAGACCA ATAAATTTGT AACTTTGCAG 120
CGAAA 125

SEQ ID NO:1713

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01930

SEQUENCE DESCRIPTION:

GATCAGCCCA TCTCAGCTTG CTGTTTCAAT CACAATGGAA ACATATTTGC ATACGCTTCC 60
AGCTACGACT GGTCAAAGGG ACATGAATTT NATAATCCCC AGAAAAAAN TTACATTNC 120
CTGCGTAATG CAGCCGAAGA GCTAAAGCCC AGGAATAAGA AGTAGTGGCT GGAGACTCTG 180
GCTCAGCCAG AGTTGTTTCT CTCCANTCTG CCTCATCTCT GTACGANTTT GGGTCCCAGC 240
CTTGTTGGGT TGTCAAGCAT GGACATGGAT TTCAACCCCT GGAGAAAACG NTGTCATTGT 300
TCAGCAGCTG AGNGCCCCAG GCGTCCGNGG CGNCTTTN 338

SEQ ID NO:1714

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01931

SEQUENCE DESCRIPTION:

GATCCCATAT CTATTACCGT GTCCATAGGA ATAATAGGTA AGGGCTCTGT CTCTGTCAAG 60
CCATGTAACA AAGGACACTG TTAAG 85

SEQ ID NO:1715

SEQUENCE LENGTH:260

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01932

SEQUENCE DESCRIPTION:

GATCCAGCCC TGGTTCTGGC TGTGGTCAGC AGATGCCAGT NAAGGGTTTT GTGTGTTTAG 60
GCCTCATTTT TTTGTCTTTT TCCTACTCCG TTCCTGGCAT TTGCTGATTT CTAGTGTATA 120
CTCTGTAGTC TCAGTTCGTG TTTGATTCCA TTCCATGGAA ATAAAAAGTA TGTGTACAT 180
ACTGCCGAAG AATTGTCTTG CAAGTNAAGG CTTCCCCCTT TACTATAAGA CTATAAATAA 240
AANCTTATTT NATCCNAAA 260

SEQ ID NO:1716

SEQUENCE LENGTH:430

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01933

SEQUENCE DESCRIPTION:

GATCTTGTGC TGTGCTATCC GCAGAACCGC GAGATGGTCT AGAGTCAGCT TACATCCCTG 60
 AGCAGGAAAG TTTACCCATG AAGATTGGTG GGATTTTTTG TTTGTTTGT TTNNTTGT 120
 TGTGTTTGT TGTGTTTGT TTTGCCACTA ATTTAGTAT TCATTCTGCA TTGCTAGATA 180
 AAAGCTGAAG TTACTTTATG TTTGTCTTTT AATGCTTCAT TCAATATTGA CATTGTAGT 240
 TGAGCGGGGG GTTGGTTTG CTTGGTTTA TATTTTNCA GTTGTGTTG TTTGCTTGTN 300
 ATATTAAGCA GAAATCCTGC AATGAAAGGT ACTATATTG CTAGACTCTA GACAAGATAT 360
 TGTACATAAA AGAATTTTTT TGNCTTTAAA TAGATACAAA TGTCTANCAC CTTAATCAA 420
 GTTGACCTN 430

SEQ ID NO:1717

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01934

SEQUENCE DESCRIPTION:

GATCGAGCCA CTGCGCTCCG GCCTGGGTGA CAGGAGACTC CATCTCAAAA AATAAAATTA 60
 AAAAAAAAC TACTACAATA AATTATCACC TTGGACTGTA TAAAACAACT TTNAACTAG 120
 TCTTTTNAAA AAGTACACTT AAATAAAAT CTAANCATAA GNGANTGTAA A 171

SEQ ID NO:1718

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01935

SEQUENCE DESCRIPTION:

GATCGCTCAG AAAATGGGAA CCCAGGGCAA ATTGTATGTG CTCCTTACTG GGTTTATTAT 60
 AAGTGCACA TGTTTTTTAT AATAAACAT AGGTGATTTC ACCTTAATGG ACAA 115

SEQ ID NO:1719

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01936

SEQUENCE DESCRIPTION:

GATCCTCCA CCTCAGCCTC CTGAGTAGCT GGGACCATAG GCTCACAACA CCACACCTGG 60
 CAAATTTGAT TTTTTTTTTT TTTCCAGAGA NGGGTNTTG NANCATTGCC CAGNN 115

SEQ ID NO:1720

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01937

SEQUENCE DESCRIPTION:

5 GATCTAGCAC TTTACAAAGT AAGTTTTTCT GTNACTTAGA GCTGAAAATA AAAGCAATGT 60
AGAGTTACGC TTTTATAAGT ATTTNANGTT TCANAAATNA TGCATACAGC AATTN 115

SEQ ID NO:1721

SEQUENCE LENGTH:114

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01938

SEQUENCE DESCRIPTION:

15 GATCATTTAG TTCTATCTAT TTAGAAATAT GTAAACTGG ATTTTTTTTT AAGTAATATG 60
TGACCAAAGT TAATTTTGTC CCAAAGGTCT AAATAAGAG CAGTTTCCCA TAAA 114

SEQ ID NO:1722

SEQUENCE LENGTH:119

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01939

SEQUENCE DESCRIPTION:

25 GATCGCCACA GCCCTTCTTG GAAGAAAGGC GTCTGTGTTT CAGGTTCCAC GCGAGTCACC 60
TCTTCGTCT TAATGTTTAC CGTCCACAGC TTTGGAATAA ACCATCCTGG GAAGTTAAA 119

SEQ ID NO:1723

SEQUENCE LENGTH:113

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01940

SEQUENCE DESCRIPTION:

35 GATCTTTGAC TGTATCATGC ATTGTACAAT TGATTTCATA TTTTATGAAA TGCCTTAATT 60
TTCCTACTAT AACATAAAGA CAATGATGAA TAAAGTTTAT GTGTATGATT AAA 113

SEQ ID NO:1724

SEQUENCE LENGTH:113

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01941

SEQUENCE DESCRIPTION:

45 GATCAGAAAC ATACATACCC TNCCTAGGGA TTTAGAAAGT GGGTTGGCAG TCTTTCCTCA 60
CGTCCATCAC GCANTTGGNA CCTACTNCAG TGTATTGTAA ACTTTTTTCT CNN 113

SEQ ID NO:1725

SEQUENCE LENGTH:111

50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01943

SEQUENCE DESCRIPTION:

5 GATCCCAGAG GTCANGACCA AANCCAATCA GTGAAAATTC AACTNTAGCT GTGAAAACAT 60
TGCACATAACA GGAGCTATCC AACAATGGAC CAGAATGTTG ACAATAAAGT N 111

SEQ ID NO:1726

SEQUENCE LENGTH:113

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01944

SEQUENCE DESCRIPTION:

15 GATCCCGCAG GTGGCACGTG ACAGCTAGGG TTCAAAACGT TCTCACCAA TCCAATGCTC 60
CTCACATATT AATTTTATAA CCAGACAAAT AAATATTAGA GACAACCACC AAA 113

SEQ ID NO:1727

SEQUENCE LENGTH:109

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01945

SEQUENCE DESCRIPTION:

25 GATCTCAAAA TTCCAGAATT CCCTGTACAT CTNTCCACGT GCTTGTGCTC CAGGTGTGAC 60
TTGTAAACTG TCTAGTGTTC GCNTTAAATA AAATGGCACC GAGCATAAA 109

SEQ ID NO:1728

SEQUENCE LENGTH:329

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01946

SEQUENCE DESCRIPTION:

35 GATCCGTATC GGTTTAAGAA GCGGACGGAG CTGTTTCATTG CCGCCGAGGG CATTCACACG 60
GGCCAGTTTG TGTATTGCGG CAAGAAGGCC CAGCTCAACA TTGGCAATTT GCTCCCTGTG 120
GGCACCATGC CTGAGGGTAC AATCGTGTGC TGCCTGGAGG AGAAGCCTGG AGACCGTGGN 180
AAGCTGGCCC GGGCATCAGG GAACTATGCC ACCGTTATCT CCNACAACCC TGAGACCANG 240
ANGACCCGTG TGNAGNTGCC CTCCGANTCC AAGANGGTTA TNTCCTNAGN CATCAGNGCT 300
40 GTGGTTGGTG TGGTGGCTGG NGNTNGNCN 329

SEQ ID NO:1729

SEQUENCE LENGTH:109

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS01947

SEQUENCE DESCRIPTION:

50 GATCTGTCAA TTCTTTGTN CAGAATGATT TGAAGTATTG TATTCAGTTT ACATGCATTA 60
TTGGNTTATA ATNAATATCT AATGAAAATA CATGTTGTTA TATTGTAAA 109

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SEQ ID NO:1730
SEQUENCE LENGTH:215
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01948
SEQUENCE DESCRIPTION:
GATCAGCTGA TGGAGCTCCT GATTTGACAA AGGAGCTTNC CTCCTTTGAA TGACCTAGAG 60
CACAGGGAGG AACTTGTCCA GTAGTTTGA ATTGTGTTCT TCGTAAAGAC TGAGGCAAGC 120
AAGTGCTGTG AAATAACATC ATCTTAGTCC CTTGGTGTGT GGGNNNTTG TTTTTTTTTT 180
ATATTTTGAG AATAAACTT CATATAAAAT TGAAA 215

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SEQ ID NO:1731
SEQUENCE LENGTH:107
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01949
SEQUENCE DESCRIPTION:
GATCGCACCG CCCCTCGCAG AGAGTGTATC ANCTGTTTTA TTTTGTAAG AACAAAGTGC 60
TAAATAATAT TNATNACTTG GTTTGGTTNC AAAANCGGAT TAAATGN 107

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SEQ ID NO:1732
SEQUENCE LENGTH:107
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01950
SEQUENCE DESCRIPTION:
GATCACTGTG GTNTTCATAT TTCTAAAATA AATGAATTAA AAANTTTAAN GNCTTAGATG 60
CTTATCTCTA TCATAGCTCA GAATGCAACT NCAATACCCC CATTCTN 107

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SEQ ID NO:1733
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01951
SEQUENCE DESCRIPTION:
GATCAACTGT ACGCCTTTGG TATCTGACCA TAAAGTCTTT TGCTCCGCTG ACATTGGGT 60
GATGTCTTCA CATGGAAATA TAATAAAAT AAAAATCTAG TTAAA 106

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SEQ ID NO:1734
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS01952
SEQUENCE DESCRIPTION:

GATCGAGGCT TCAGTGAGAT ATGGCTGAGA CACTGCTCTC AGCCTGGATG ACAGAGTGAG 60
AACCTGTCTC AAACAAGAGA AAAAAATAAA TCAAANNCTA TTCAA 106

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SEQ ID NO:1735
SEQUENCE LENGTH:151
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS01953
SEQUENCE DESCRIPTION:
GATCTGAGGA GGCTTCGTGG GCTTTTGGGT CCTCTAACTA GGACTCCCTC ATTCCTAGAA 60
ATTTAACCTT AATGAAATCC CTAATAAAAC TCAGTGCTGT GTTATTTGTG CCTCATTTC 120
CCAGGAATAG TCACTGCCTT GAGGAACCAA A 151

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SEQ ID NO:1736
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01954
SEQUENCE DESCRIPTION:
GATCCACCCA CCTNAGGCTT CCCAAAGTGC TGGGANNACA GNCGTGANAA CCACGGCTTC 60
GCCAACAATG GATTTTAA TTTATTCAC GCTCACAAA AACCTN 106

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SEQ ID NO:1737
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01955
SEQUENCE DESCRIPTION:
GATCNANCT CAACACCTAG TGCAATTCTT TTTACACATT AGGNACTTAG TAATTNGGGT 60
TGAATTGTGT TGAACCTAACC TGGCGGTATA GGCAAAANTT GGAAGN 106

35

SEQ ID NO:1738
SEQUENCE LENGTH:105
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS01956
SEQUENCE DESCRIPTION:
GATCTCCCAT TTCTAGGAAC CCCAGTCTTG CTTCTCCGCA ATGGCACATG CTTCCACTCC 60
ATCCATACTG GCATCCTCAA ATAAACAGAT ATGTATACAT ATAAA 105

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SEQ ID NO:1739
SEQUENCE LENGTH:105
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS01957

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SEQUENCE DESCRIPTION:

GATCCAAGAG ATATATTGG CAACTTTTTC TAGAAAAGGC ACATTGGGTA TAATTCATTA 60
 CATTCTTGAG TTTTITGGG TTTTITTTT TTTTITNGNG NNANN 105

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SEQ ID NO:1740

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01958

SEQUENCE DESCRIPTION:

GATCCAGCTG GAAAGCTGAA GTATTTCGAT AAAGTGAATT GAGAAATACT TCTTCAAGTT 60
 ATGATGCTTG AAAGTCTCA ATAAAGTTCA CGGTTTCATT ACCNAAA 107

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SEQ ID NO:1741

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01959

SEQUENCE DESCRIPTION:

GATCTTAAGG TATCAGTATT TCAGAATCCT GCGACGATTT TATTCTAAA TTCATGTACT 60
 GTATGTCCAT AAGTGAAAT AAAATNTCAT ATTCTTTCT ATNATTGGTA TCATTCAAA 119

25

SEQ ID NO:1742

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01960

SEQUENCE DESCRIPTION:

GATCCTTAGC TCTTTGCTCT ATGGCCCTTC CTCATCAGGG GACCGTTTCC CCCCTCTTCC 60
 TTCACAGTAT TTAAGAAATA AAAGTCGGAT TTTNCTGGCT GCTTTCTCTC TAAA 114

35

SEQ ID NO:1743

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01961

SEQUENCE DESCRIPTION:

GATCGCCCCA TTGCACTNCA ANCTGGACAG CAAGAGCAAA ACTCCGTNTC AAAAAACAAA 60
 AACAAAANCA AACAAAAAAN TTCCCTGAG AGAAAACCTA TN 102

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SEQ ID NO:1744

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01962

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SEQUENCE DESCRIPTION:

GATCACACAC TAAGAGAACG TTGATTGCCT CGGCTATTGT GCTGGCTGGA CACTTTGGTC 60
 ACTTTTGAAG CATGTTAATA AATGTCACTG ATTAAACAA A 101

5

SEQ ID NO:1745

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01963

SEQUENCE DESCRIPTION:

GATCCAAGTT TGAACAAT TTTAGGCTAC TAGATATGAA CAACATCTTG ATTATGTAGT 60
 TGAAGGAAAT TAAAGATGAA TGGTTTAATT AAAAATTAAA 100

15

SEQ ID NO:1746

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01964

SEQUENCE DESCRIPTION:

GATCAAATTA AATAATTCAA GCCCTGCCTT CAAAATGAAA TTTTTTTTTT AGTATTATTT 60
 AGCAAAANCA ATAAACCCA AATTTTTTTA ACCATCAAA 99

25

SEQ ID NO:1747

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01965

SEQUENCE DESCRIPTION:

GATCACTTCA AGCAAGCCCC CATGATGGTT CTCAGTCCTG CTTCTCTGTG GGTACGTGCC 60
 CCTCTGTTA AAAATAAACT GAATATGGAT GTTTAAA 97

35

SEQ ID NO:1748

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01966

SEQUENCE DESCRIPTION:

GATCAAAATG AAAACCTGTT GATGTGAATT CAGTTATTGA ACTTGTTACT TGTTTTTGCC 60
 AGAAATGTTA TTAATAAATG TCAATGTGGG AGATAATAAA 100

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SEQ ID NO:1749

SEQUENCE LENGTH:95

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01967

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SEQUENCE DESCRIPTION:

GATCTGATGT TCCTTTTATT TATAACAATG TTAAATGCAA TTGTCTTGTA CCTTGAGTTG 60
AGTATTACAC ATTAAAGTAA AGTACAAGCT GTAAA 95

5
SEQ ID NO:1750

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01968

SEQUENCE DESCRIPTION:

GATCCAGAAG TAAATGTATC TNCAAGCTGA TTAAATTGT AGATTNNTC TTCATTGCAT 60
ATTNCTGAT GTTGAATAAA GTCTGAGTAT TAAA 94

15
SEQ ID NO:1751

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

20
TOPOLOGY:linear

CLONE:HUMGS01969

SEQUENCE DESCRIPTION:

GATCCAAAGT ATATTTTAC TGAGAATATA TCTGAAAAA TTTGAATTGA GATTAAATT 60
TTAAATGAAA TATATTACT TTTTAAAA 89

25
SEQ ID NO:1752

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

30
TOPOLOGY:linear

CLONE:HUMGS01970

SEQUENCE DESCRIPTION:

GATCCTGGCC CCTCAACCTC CTGTGGAACC CAGCAGTTCT GTTATATCCC CTGCTACCCT 60
AGATGAATTA AGACGGTTAA ATACTGAAA 89

35
SEQ ID NO:1753

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

40
TOPOLOGY:linear

CLONE:HUMGS01972

SEQUENCE DESCRIPTION:

GATCTGTCTT GCTTATTGTT GCCCCCTGCG NCTAGCACAA TTCTGACACA CAATTGGAAC 60
TTACTAAAAA TTTNTTTTCTA CTGTTTAAA 89

45
SEQ ID NO:1754

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS01973

SEQUENCE DESCRIPTION:

GATCATATGG TAGTTTGTGTT TTACTAATCT AAGGGTACTA GCATCTACAA TNATATAGAC 60
 AAAATAAAAT ATTTCTTTAA TGGCAAA 87

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SEQ ID NO:1755
 SEQUENCE LENGTH:85
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

10

CLONE:HUMGS01974

SEQUENCE DESCRIPTION:

GATCTGTTTT CTCTAAATC TTACCATATT GTCTGTATAT GGTGTGAAAT NCAATGGAA 60
 AGTAAACGT TTTGGCCCTG ATAAA 85

15

SEQ ID NO:1756
 SEQUENCE LENGTH:88
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

20

CLONE:HUMGS01975

SEQUENCE DESCRIPTION:

GATCCTGCTG GAAACCACGG CAACCTGTAT CCACTATTAG GAGGTAAAAA TCAATAAAAT 60
 GGCCCATTC A TTTGTGTTGT AGCTCAAA 88

25

SEQ ID NO:1757
 SEQUENCE LENGTH:84
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

30

CLONE:HUMGS01976

SEQUENCE DESCRIPTION:

GATCTACAAC ATATAAAATT GTGTATTTTC NTTGGTTGT CCCTATTAAC AAAAAAGTAT 60
 TTNAATAAAA ANTTGAAATG NAAA 84

35

SEQ ID NO:1758
 SEQUENCE LENGTH:82
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

40

CLONE:HUMGS01977

SEQUENCE DESCRIPTION:

GATCCCACTG TAAATTTGGA AATGGGCAGT TCTGAATTTT CACGTTTGAA ATGTAAAAATA 60
 TAAACTTCAG TCAATATCCA AA 82

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SEQ ID NO:1759
 SEQUENCE LENGTH:82
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01978

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SEQUENCE DESCRIPTION:

GATCTGGACG TTCACGTGCA CTCTCTTCCT GTACAGTATT TATTGTTTCCT GGCACCTTAT 60
TTAAAGATAT TTGACCCTCA AA 82

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SEQ ID NO:1760

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01979

SEQUENCE DESCRIPTION:

GATCCTTACT CCTGCATTGT TCTTTGCCAG NGNCCTATTT AAAAATTTTA AAATTCTCAT 60
TAAAGTCAGC TTGGGTTTAA A 81

15

SEQ ID NO:1761

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01981

SEQUENCE DESCRIPTION:

GATCTAAAGA GAAAAGGGAG AAGAGGGAAA AAGGAAACAA AGGAGAAGAA AGAGGGAAAG 60
GAAAAAAAAG AAAAAGAAA 79

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SEQ ID NO:1762

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01982

SEQUENCE DESCRIPTION:

GATCATGAAA GGTGATAAGC TCTTCTATGA TAGGGGAAGT AGCGTCTTGT AGACCTACTT 60
GCGCTGTTGT ACTCTGAAA 79

35

SEQ ID NO:1763

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01983

SEQUENCE DESCRIPTION:

GATCAAAATAT TTGCTTTN ACTNAAATCA GCCAGCCCAT NACCCCAAT AAAGGCAGC 60
TGCCTCTGCT CCCTCTGAAA 80

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SEQ ID NO:1764

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01984

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SEQUENCE DESCRIPTION:

GATCAAAATTT CTAAAGCAA ACAACAAAAA TGTACATTTC TGTTTTTCCT TTAAATAAAC 60
 AGGTGTACTC TTTATCAAA 79

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SEQ ID NO:1765
 SEQUENCE LENGTH:78
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

10

CLONE:HUMGS01985
 SEQUENCE DESCRIPTION:
 GATCTAGTGT CCTTTTGTGA CACTAAACAG GTGAATGCTG ACTTTTTTCA TTCTCCAATA 60
 AATNTCACTG AACTGAAA 78

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SEQ ID NO:1766
 SEQUENCE LENGTH:75
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01986
 SEQUENCE DESCRIPTION:
 GATCTTTGTT TAGTTTCAAG TCTTTTATA ACTAAATCTG CTGGCATTAG ACAATAAATA 60
 CATTTTCAAA ATAAA 75

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SEQ ID NO:1767
 SEQUENCE LENGTH:75
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

30

CLONE:HUMGS01987
 SEQUENCE DESCRIPTION:
 GATCATATAT ACTTGCATAA TATCATCCCT TCCCTTGATT TCTTTCAATC TAAAAATAAA 60
 TATGAGAAAA ACAA 75

35

SEQ ID NO:1768
 SEQUENCE LENGTH:78
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

40

CLONE:HUMGS01988
 SEQUENCE DESCRIPTION:
 GATCGATATT AATGTATCCA ATGAAATAAT CGACTTGTNC TTGATAGCCT CATTAAAGCA 60
 TTTGGTTTTN CACATAAA 78

45

SEQ ID NO:1769
 SEQUENCE LENGTH:74
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS01989

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SEQUENCE DESCRIPTION:

GATCTGAGCC CCCAAGATGG AGAATGGGGA GGAGCTTTT ATGGCGGACT GATTAAAACT 60
CTTAAGCATT TAAA 74

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SEQ ID NO:1770

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS01990

SEQUENCE DESCRIPTION:

GATCTGCTTG GCCTTGATAA GCTATGTTGT TGCACTTAA ACATTAAAT TATACAATCA 60
TCAACCCCA AA 72

15

SEQ ID NO:1771

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01991

SEQUENCE DESCRIPTION:

GATCCTCCCC TTCAAATGAC TGTAATTAAC AACACTTAAA AAACCTGAAT AAAATATTGA 60
AACCTCAAA 69

25

SEQ ID NO:1772

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01992

SEQUENCE DESCRIPTION:

GATCTATTCT GAAGCTGTTC ATTTTAAACA AATAAAATGT TACAGGTTTC ACATGATTGA 60
TTCTCAAA 68

35

SEQ ID NO:1773

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01994

SEQUENCE DESCRIPTION:

GATCCGTAAC TNCGGGATAA GGATTGGCTC TAAGGGCTGG AGAAGGAATG AATAAAAAAA 60
AAGAAA 66

45

SEQ ID NO:1774

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01995

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SEQUENCE DESCRIPTION:

GATCCCATGT CTCTGCCAGG ACCAAGGCNG ATGTTTCCCC ACTAATAAAG TGCCGGGTGT 60
CAGCAAA 67

5

SEQ ID NO:1775

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS01996

SEQUENCE DESCRIPTION:

GATCCTTTTT AATACCACAG CATTGTACT GTTCCTTTTT AATATACTGA AAATATAAAA 60
GGAAA 65

15

SEQ ID NO:1776

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS01997

SEQUENCE DESCRIPTION:

GATCCGATTA TTTCTGCCAG TNTATTTTGG NCACTTTATA ATCATTAAAG CACTTTCTTG 60
GCAGGCNCAA A 71

25

SEQ ID NO:1777

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS01998

SEQUENCE DESCRIPTION:

GATCTTACAA TAATGTTCCA CTCTGCAAAT TTTAAGGTT CAAATAAAGT TTAATTGTTT 60
GCAAACTGTA AA 72

35

SEQ ID NO:1778

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS01999

SEQUENCE DESCRIPTION:

GATCATTGCA CCATGTCAGA CTTTGTATA TNCCTTGAAA ATAAATGAAA GTNAGAATCN 60
TCAAA 65

45

SEQ ID NO:1779

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02000

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SEQUENCE DESCRIPTION:

GATCCTGTCC TGATTCTCAA AAATTATTTT CTCTGTATGA TTAAGTTT ATTCCATTTA 60
AA 62

SEQ ID NO:1780

SEQUENCE LENGTH:66

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02001

SEQUENCE DESCRIPTION:

GATCCCTTCA TTTGAATATT AATGGCTTTT TCCATTAAAG AATAAAATAT TTTGGACAAT 60
GCCAAA 66

SEQ ID NO:1781

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02002

SEQUENCE DESCRIPTION:

GATCAAATTT ATAAGTTATT ATTTTAAATT TTCTAAATTA AATAAAAGAA AGAATGCAAA 60
CCAGGAAA 68

SEQ ID NO:1782

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02003

SEQUENCE DESCRIPTION:

GATCAATAAA GAGTAATTTT TTGCTAAATA AATAAAAGAA ACCTTGTTGA AAAACTAAA 59

SEQ ID NO:1783

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02005

SEQUENCE DESCRIPTION:

GATCTGAATN ATGCACCCCA CCCCACCCC AATAAGAAA TAACAGAAAA CCCTCGAAA 59

SEQ ID NO:1784

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02006

SEQUENCE DESCRIPTION:

GATCTTCATT TTTTTTTTA AACTGGCGT TTTTGAATA AAAACCTTTT GTCTTAAA 58

5 SEQ ID NO:1785
 SEQUENCE LENGTH:59
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02007
 SEQUENCE DESCRIPTION:
 GATCTCAGTT GTAAATAGAA AAATCTAATT CAATAAACTC TGTATCAGCC CCCAACAAA 59

10 SEQ ID NO:1786
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS02010
 SEQUENCE DESCRIPTION:
 GATCCAAAGT CATGTGTCCA CACATTCATA AATAAAAATT TTACCTATGA AA 52

20 SEQ ID NO:1787
 SEQUENCE LENGTH:51
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02011
 25 SEQUENCE DESCRIPTION:
 GATCCAGTGA AGCCAGAAGC CAAATAAACT CAAAAGCTGT CTCCCCACAA A 51

30 SEQ ID NO:1788
 SEQUENCE LENGTH:54
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02012
 SEQUENCE DESCRIPTION:
 35 GATCCTAATT TATGCCTATG CAAAAAATAA ATAACGCCCA AGAGCTGTGG GAAA 54

40 SEQ ID NO:1789
 SEQUENCE LENGTH:53
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02013
 SEQUENCE DESCRIPTION:
 45 GATCGCCTAG TATGTTCTGT GAACACAAAT AAAATTGATT TACTGTCTGC AAA 53

50 SEQ ID NO:1790
 SEQUENCE LENGTH:58
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS02025

SEQUENCE DESCRIPTION:

GATCCGTAAGT AATAAATTCT CAGAGGACTC AGCCTTTCCT GCGGGTCTGG AGCTCAAA 58

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SEQ ID NO:1791

SEQUENCE LENGTH:597

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02039

SEQUENCE DESCRIPTION:

GATCAGAGTC TCTTGGGCAT TTTATATTTT GCATTCTGAT GTACCTAGGA GTTTGTGTAA 60
 ACAGATGATG TATGTNAGTA TTTATCCCAT TTTATGCAAT TAACCAAATC AACCAAAAAA 120
 AGTGACCATG AAGTCCTGTA TTTGTNTTTT TACTACATGT AGGAACTCTC ATGTGAATGA 180
 GTACTGTAGT AATCCATTCT ATGGGAGCCT TATTCAGAA ATATTTCAAA CTGGTGCAAA 240
 TGGAAAAGAC TTTCTCTTTT CCTTTAAAGC TAAAGACAAG AATATCATGC TATACAGGTG 300
 CAACTCAATC CCCGTTAATA AAAACCAATG TAGGTATAGG CATTCTACCC TTTGAAATAG 360
 CTGTGTCCCA ACCTGTTGCC ATTGATTTTT TGGGAATGGC TTTAGGAAAT ATCCAAGTTG 420
 TCCTTGGAAT TGTCTAACCA TGGNCATAAA CAGTTGTCTC CCTTCTACTT GTGTAGAATA 480
 CTTTGGNCTT AATTTTCCTN CCAGATACAG GGGGGTACCT GCCTGTTTTT CNAAGGGTTT 540
 ATTACTGGNG GTACCATTTG GTAGGATTGT TTTAAATAAA AAAACCTGGT TTTTAAA 597

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SEQ ID NO:1792

SEQUENCE LENGTH:518

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02040

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SEQUENCE DESCRIPTION:

GATCCAAAAC TGGACCCTTG GAGCCGTCGA CTCACAGATG GATGACATGG ACATGGACTT 60
 AGACAAGGAA AAAANNCAGG ACTTGAAGGA GCTCAAGGTG CTAGTGGCTG ACAAGGACCT 120
 TCTGGACCTG CACAAGAGCC TGGTGTGCAC TGCTCTCCGG GGAAGCTGG GCGTCTTCTC 180
 TGAGATGGAA GCCAACTTCA AGAACCTGTC CCGGGGGCTG GTGAACGTGG CCGCCAAGCT 240
 GACCCACAAT AANGATGTCA GAGACCTGTT TGTGGACCTC GTGGAGAAGT TTGTGGAACC 300
 CTGCCGCTCC GACCACTGGC CACTCAGCGA CGTGCGGTTT TTCCTGAATC AGTATTGAGC 360
 GTCTGTCCAC TCCCTCGATG GCTTCCGACA ACAAGGCCCT CTGGGACCGC TACATGGGCA 420
 CCNTTCCGNG GCTGNCCTNCT GCGGCCTGTN ATCATGACTG AGGTGGCCTN CCAAANGTTN 480
 CGCCCAAGGT TGACAATAAA GTTGCTCTGA GTTTGAAA 518

40

SEQ ID NO:1793

SEQUENCE LENGTH:513

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02041

SEQUENCE DESCRIPTION:

GATCTGTAAT TTTAATTTTC ACCCTCTGTA CCCCATGACC TTATCCTTCC TCTCCTTCCT 60
 TGTTACCCAT GAAAAACTGG CAACATTCCA AGAATAGCAT CTGTACAAAG GGGAAAGAAC 120

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ATAAAGGTAA AACAAAACAA AACAACATTT TGAGAACAAA GATGACCATA ACCACTGAAG 180
GGAATCACAT CTTTAAAGAC AAATTCATAT TCTTTTATTT GTTATGGCAG ATGACAAGAT 240
GGTACAACCT TTATTCTTTT NCAAAAATAAA ACAAAGGGCA CAGCATCTGT AGTCAGCCGA 300
CAACTATTNC GGCCTTTTGG GGGTNGGTCT NGCCGTACTT GTGATTTCGA TGGTACGTGA 360
CCNTNTTCTG GAAGGCTTGC CCCNTTGCCC GTGTACATAG GTGCATTGGT TNCTNTGGGA 420
GGGGCCCAAG NACTTTTNGG CNANNGTTGT ACTGGTATTG TNATGAAAT TNCGGTTGGN 480
CCTCTTGNA NTTTTTNTG CANGAANGNN GGN 513

SEQ ID NO:1794
SEQUENCE LENGTH:499
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

CLONE:HUMGS02042
SEQUENCE DESCRIPTION:
GATCTCTTAA GAGATGATGG ACTCATGTAT GTCACCCGAC TTCGCAACAC TGGGGTTCAG 60
GTGACTCATA ACCATGTTGA GGATGGATTC CATGGAGCAT TTTCATTCTT GGGACTTAAA 120
ATTAGTCACA GACTTATAAA TCAGTATATT GAGTGGCTAA AGGAAAATCT ATAGTAAAAC 180
ATGTAGCTAT AACATATTTT AAAAAATAAA TCTGAAAACC TCAGAAAATT TGCATTAGAA 240
ATTGGTCTTT CTTAGAATGG TCTAGTTAAG TTCCACATGT AGCATAATTC TTAATAGGC 300
ACTTTTCTGT TTTTTTTTNC TNACTGTGGG ATTTTCATNC AATTTTCTAC ATTGCTATC 360
TGCTTTTNC GNGATTTTCC NCTTACACTG TTAATCTNAT TTTAAAAAA TGTACATNCC 420
NNGNANACNT TAANTTTGGG GAGTTNGGCT ACNANTTNAC GGTGCCAGG GGGNTTAAAT 480
GGTGGGGCCA ATTTTAAA 499

SEQ ID NO:1795
SEQUENCE LENGTH:483
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02043

SEQUENCE DESCRIPTION:
GATCAAAGCG CCACTGCCCT GCACTTCCTG GGCCGCGTGG CAACCCGCTG NGCACAGCAT 60
GAGGCCAGGG NCCCAGAACA CAGTGCCTGG CAAGGCCTCT GCCCNTGGCC TTTGAAANAA 120
AGGCCAGCAG CAGATAACAA CCCCGGACAA ATCAGCGATG TGTCACCCCC AGTCTCCAC 180
CTTTTCTTCT AATGAGTCGA CTTTNNCTG GAAAGCAGCC GTTTCTCCTT GGTCTAAGTG 240
TGCTGCATGG AGTGAGCAGT AGAAGCCTGC AGCGGCACAA ATGCACCTCC CAGTTTGCTG 300
GGGTTATTTT AGAGAATGGG GGTGGGGAGG CAAAGAACCA GTGTTTAGCG CGGGACTACT 360
GTTCCAAAAA GANTTNCAAC CGNCCAGNTT GTTTGTGAAA CAAAAAAGTG TTNCCTTTTT 420
CAAGTTTGAG AACAAAAATT GGGGTTTTAA AATTAAAGTA TACCATTTTT TGCATTTGNC 480
AAA 483

SEQ ID NO:1796
SEQUENCE LENGTH:481
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02044

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

5 GATCCAAAC GCTTCGAGGC ACCCCAAATT ACCTGCCCAT TCGTCAGGAC ACCCACCAC 60
 CCAGTGTAT ATTCTGCCTC GCCGGAGTGG GTGTTCCCGG GGGCACTTGC CGACCAGCCC 120
 CTTGCGTCCC CAGGTNNNNA GCTCTCCCTT GGGCCACTAA CCATCCTGGC CCGGGCTGCC 180
 TNGCTGACC TCCGTGCCTA GTCGTGGCTC TCCATCTTGT CTCCTCCCGG TGTCCCAAT 240
 GTCTTCAGTG GGGGGCCCCC TCTTGGGTCC CNTCCTCTGN CATCANCTGA AGACCCCCAC 300
 GGCAAACT GAATGTCACC TGTGCTGCN GNCTCGGTCC ACCTTGCCTG CCGTGTGTTGA 360
 10 CTAAACTTNA ACTTCTTTTA ACGGTAATAT TTCCGGCAAA AATCCAATGG TTTGGGTTTT 420
 GGTCCTTTAA CNTTGTAAC GGTGCAAT CCAAATAAAA GCAATTAAAA AGTCAATGAA 480
 A 481

SEQ ID NO:1797

15 SEQUENCE LENGTH:462
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02045

SEQUENCE DESCRIPTION:

20 GATCTAAAG GGTTCCTTA GAAAGGGCAA TATTGTCAA TGAAGTAAGC AGAAGGACTC 60
 TGGGTTAGAA GCATCTGCAC AAAAAGTGGT GAGACCTACT CTCCACTGCT CTGCAGCTGG 120
 ATGGCTGATG GCAGGCTGAG CAGTGGGGAA GCAGGTTTGA ACAACAGGGA GTCCTTCCAG 180
 GTCAGTGTAT ATTNAGAAGA AACATAAAAC TATTGTCTGT TACATCCGA GGTGAGCCTT 240
 25 CTNCTTAACG TTTTATAATA TGCAAAATNCC AGCTTCTGGA AAGCANGTAT CATCATGTAC 300
 CAAATGCTTT ATACACCATC ACATTCATGA NTTTTNAGC ATGGTCAGAN CTTGTGTAAA 360
 TATGTCTCTT AGGATGATTT TGGGGGAGGA TGTGATTAT TTTCCATAAT TTCCAAANTN 420
 GCATTTTCCA TTTCAAAATA AGGNTAATCT NTTGGGGCCA AA 462

30 SEQ ID NO:1798

SEQUENCE LENGTH:448
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 35 CLONE:HUMGS02046

SEQUENCE DESCRIPTION:

40 GATCAGCCTG CAGCCATCCC CCGACCCTGC TGCTAGGCCA CGGTCTGCGC CCTGGGGCCT 60
 CATCTCCCC AGCCCACTTG TTTTCCCCC TTTTATCCC TAGGCCCTTT TCAGACTCCT 120
 GGGCCCTTGG NNNCTCTTCT CCCATCTCCC TTCACAGGAT GACACCCTCC CATACCCCAT 180
 AGCTGGGGCC AGCAGGTTCT GCTGAGGGTG GGGCTGGTGT AGGGACCCC AAGAGACCCC 240
 TGTCTGTCC CTTACCAAGT CCTGGGGAGG CTGGGACTCC CCCTGCCACA AGCCTGGGCC 300
 ACAGTTCACA TTCCACTGCT GGGAGAAGAA ACAGGCCGAG GCCCAANAGT GGCCTGCCCC 360
 CGGGAGCCAA AGACCCNAGT GGCCACANTG GGATTAGGGT NGGGGAGGNT TGGNAGCGCT 420
 45 NTTTTTATAA ATATTATACA TAAGGAAA 448

SEQ ID NO:1799

50 SEQUENCE LENGTH:448
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

55

CLONE:HUMGS02047

SEQUENCE DESCRIPTION:

5 GATCTGGTTG GTGGATGAAC AAGTGTACAG CTGGCCATCT CAATGGNGTT TATTACCAAG 60
 GTGGCACTTA CTCAAAAGCA TCTACTCCTA ATGGTTATGA TAATGGCATT ATTTGGGCCA 120
 CTTGGAAAAC CCGGTGGTAT TCCATGAAGA AAACCACTAT GAAGATAATC CCATTCANCA 180
 GACTCACAAT TGGAGAAGGA CAGCAACACC ACCTGGGGGG AGCCAAACAG GCTGGAGACG 240
 TTTAAAAGAC CGTTTCAAAA GAGATTACT TTTTAAAGG ACTTTATCTG AACAGAGAGA 300
 10 TATAATATTT TTCCTATTGG ACAATGGACT TGCAAAGCTT CACTTCATTT NNNNGAGCAA 360
 AAGACCCCAT GTTGGAAAAC TCCATACCAG TTTTATGCTG ATTGATAATT TATCTACATG 420
 CATTTCAATA AACCTTTTGT TTCCTAAA 448

SEQ ID NO:1800

15 SEQUENCE LENGTH:432

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02048

SEQUENCE DESCRIPTION:

20 GATCTGAATT ATCTGGCACC CTCCTGAATG GAACCCAGAG GTACCTCCTG TGTGGAAGGG 60
 TCCTGGATTT TCCCTAACAC CCACCTCTC CCCCTTCAGC CATGCTGATG GCAGAGAAGA 120
 TAAGAACTTG GAGCCCATTT CTCCTGGAG AGGAAAACTT GTCATCTGGC TTGCGGAGA 180
 AGGTTCCACC TTACGCTCGT AGTACATTAT CTTTACTATG TGCTAGGATA TCATATTTAA 240
 25 AAGGACAAAA AAATGTAAAA TACTTGAATG AGCTTGATT ATANCATTAA TATTATNNNG 300
 NGTATCTGCT TTCCAGGCTG AAGTGATTCA TTCATTATTC TAGTCTGCT TTAGTCCTTT 360
 GTAATTTGTG GTAATTATGC TTTTCTTTT AATACAAAAA AATGTATAAA ATTAACACT 420
 TGAAAAGGCA AA 432

30 SEQ ID NO:1801

SEQUENCE LENGTH:430

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS02049

SEQUENCE DESCRIPTION:

40 GATCCGNGCG AGGGCAACAG CGGNTCACCT ACAGCGCACT GTCGATGGCT GCACGAGTCA 60
 CACCGGAGCC TGGGGCAAGA CAGTGATTGA ATACAAAACC ACCAAGACCT CCCGCCTGCC 120
 CATCATCGAT GTGGCCCCCT TGGACGTTGG TGCCCCAGAC CAGGAATTCG GCTTCGACGT 180
 TGGCCCTGTC TGCTTCCTGT AAACCTCCCTC CATCCCAACC TGGCTCCCTN CNACCCAACC 240
 AACTTTNCCC CCAACCNGGG AAACAGACAA GCAACCCAAA CTGAACCNNN TCAAAAGCCA 300
 AAAANTNGGG AGACAATTC ACATGGACTT TGGAAAAATA TTNTTTTCTT TTGCATTCAT 360
 45 NTNTCAANCT TAGTNTNTA TCTTTGANCA ACCGGANCA GGCCAAAAAN CAAAAGGTGC 420
 ATTCANCCTN 430

SEQ ID NO:1802

SEQUENCE LENGTH:428

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS02050

SEQUENCE DESCRIPTION:

5 GATCCCAAGG GAAAGATGAT TTGTATGTTA AAGTGACTGC ACAAGTAAAA GTCCAATGTT 60
 GTGTGCATGA AAAGGATTCC TTGGTTATGT GCAGGGAATC ATCTCACATG CTGTTTTTCC 120
 TATTTGGTTT GAGAAACAGG CTGACACTAT TCTCTTTGAT TAGAAAAATA ACTCATAAAA 180
 CTCATAATGT TGATATAATC AAGATGTAAC CACTATAAAT ATGTAGAAGA GGNCGTTTTA 240
 AAAGACCTTA AGCTGGCATT GTGAAGGAAC ACCATGGTAG ACTCTTTTGG TAAATGTATT 300
 10 TTGTATTTAA TGAAATGCAG TATAAAGGTT GGTGANGTGT AATATANTTG TGTAAACAAA 360
 TCCTGTTAAT AGAGAGATGT ACAGAATCGT TTTTGGTACT GTATCTTGGG AACCTTTGTG 420
 AAAATAAN 428

SEQ ID NO:1803

15 SEQUENCE LENGTH:401

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02051

SEQUENCE DESCRIPTION:

20 GATCAAAACC AAAGTGTTC AATGTGACAGT CTGAAAATTA TATACTCTAC TTCATTTCATG 60
 TTACACTTTT TTCTACTCCT TACCTGCTTT TACTAATGCA TTTATCCCCA AGAAAACATC 120
 CAACAATATG GGACTAATTT GGAACAATAT CCAGCAATTG GTATTTAAAT AATTTACTGG 180
 TTACAAAACA ATATTATGAC CAGACTCCAT TTTAGAAAAA ATTAAATCTG CATCGAAAAG 240
 25 GGCCTTAAAA AATAGATTTC TAAATCAAA ATCATGGTTG GCTCATGGGT GGGATTATTA 300
 GTGTTCTTAA TAGTAGTTTG TCTGGATGTA CTTTCTGATT CTCCTGTAAT AAGCATGCAT 360
 TGCTTTTGTA ATGNNGGAAT AATANACCAA TAAAAAGGAA A 401

SEQ ID NO:1804

30 SEQUENCE LENGTH:396

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02052

SEQUENCE DESCRIPTION:

35 GATCCGGCTG CAAAATTCAT ACCAACCAAC AAATAAAGGA AGATACAAAG TCTTATAGAC 60
 ATCCGGAAAA AAGATTTTTC CCTGTGCTGG TCTATGATGT ATGTGGCAGT TGCTGTCTGC 120
 AGTTTACAAT GTATTGTAAA TGAAGATTTT TTAAATTCTA TCTTGCTGNT TNNNTNNAA 180
 ATATAAGAAA CTGGTACTTG GTAAAGAAAT CTGTCCGTAA GTACCCCCAC AATCAGTCAA 240
 40 ACTATATTTA AAGCCAGCCT GTTTTCAGAG TATGATGTCC TTAAATGTAA ACTCAAATAT 300
 CAATATTTTA AATGTCCGGA TAATATTCTA GAGGTTTAAA AAATGGAAAT ATTTGANCTT 360
 TCTATTGAAG ACAATAAAGG TACACAAGTC GTTAAA 396

SEQ ID NO:1805

45 SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02053

SEQUENCE DESCRIPTION:

55

5 GATCAAGAGC AGTGCTTCTC CATTTGTTTT GCAGAGAAAT GTTTTCATT TCCCGTGTGT 60
 TTCCATTTCC TTCTGAAATT CTGATTTTAT CCATTTTTTT AAGGCTCCTC CCCATCTCCT 120
 TTCTTAAGGC ACTGTTGCTA TGGCACTTTT CTATAACCTT TTCATTCTCG TGTACAGTAG 180
 CTAAAAATTG CAGTGATTGA GCATAACCTA CTTGTTTGTA TAAATTATTG AAATCCATTT 240
 GCACCCTGTA AGAATGGACT TAAAAGTACT GCTGGACAGG CATGTGTGCT CAAAGTACAT 300
 TGATTGCTCA AATATAAGGA AATGGCCCAA TGAACGTGGT TGTGGGAGGG GAAAGAGGAA 360
 10 ACAGAGCTAG TCAGATGTGA ATTGTATCTG TN 392

15 SEQ ID NO:1806
 SEQUENCE LENGTH:389
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02054
 SEQUENCE DESCRIPTION:

20 GATCCTATTT GGTATGTTTT TGTCCACTGT TATGATTCAT CATGTATCTT ACAAGAGCCA 60
 CTCAAGCAAG ACTCTGCTTC TATGTATGGT GAGGCCTTGT TGTCTAGGC TAGAATAAAC 120
 TCTTTGTATG CCTCAGTGAA TATGCCAGGT AAAATATATG CAGTCAAGAA TGAATTATTT 180
 TTCTGACTAA AGTGTGTAGC AGTAAGTTCA AAATNGTGCC CTTGTTTTAA CAGTTTCTGT 240
 CAACATCTTC TCATTTTCC CTACAAAAAC ACCAGGCTGT ATTATAAGTA CTGCCTGTGA 300
 GAATTTGCAC TTTATGTATT TGTGTGTGGG ATTTCTGTGT GTTTTAGCCA AATGAAGTGT 360
 25 TATCNNTAAT AACCAGGTCT CTTCAATAA 389

30 SEQ ID NO:1807
 SEQUENCE LENGTH:388
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02055
 SEQUENCE DESCRIPTION:

35 GATCCAATTG ATGTATATGT TTATATACTG GGTTCCTGTT TTATATACCT GGCTTTTACT 60
 TTATTAATAT GAGTTACTGA AGGTGATGGA GGTATTTGAA AATTTTACTT CCATAGGACA 120
 TACTGCATGT AAGCCAAGTC ATGGAGAATC TGCTGCATAG CTCTATTTTA AAGTAAAAGT 180
 CTACCACCGA ATCCCTAGTC CCCCTGTTTT CTGTTTCTTC TTGTGATTGC TGCCATAATT 240
 CTAAGTTATT TACTTTTACC ACTATTAAAG TTATCAACTT TAGCTAGTAT CTTCAAACCT 300
 TCACTTTGAA AAATGAGAAT TTTATATTCT AAGCCAGTTT TCATTTTGGT TTTGTGGTTT 360
 40 TGGGTTAATA AAACAATACT CAAATAAA 388

45 SEQ ID NO:1808
 SEQUENCE LENGTH:379
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02056
 SEQUENCE DESCRIPTION:

50 GATCTTTTCC ACCAGCACCC AGAGTGCCT CTTTCTGGGC AAGGTCGTCG ACCCCACGAA 60
 ACCATAGCCC TCCCAGGGCT GCTCATCTGT TCCAAGCAGG AGGATGTGGC AGGGGAGGGC 120
 TGGGAGTGAG TAGCTCTGTG TTTAGAGTTG GGGACAAGGA TGACACCGAA GTCCAGGAGT 180

EP 0 679 716 A1

5 CCAGGACAGC AGGTGCTGGC CGGTGGGGAG CGGGGAGGGG CACTGAGATG GGCAGGGCCT 240
 GGACATTCCA CACCCTGGTG CTGTGCAGCC TCTGGCAGAG CATCCGACCT CTTGGAGCAA 300
 GTTCTGCCT CTGGAAGGG GGCGGGCCCT TTTCACAACA GGCTGGTTG TACCGAGTAA 360
 ACAACACGNT GCCATGAAA 379

SEQ ID NO:1809
 SEQUENCE LENGTH:379
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02057
 SEQUENCE DESCRIPTION:
 15 GATCCTAGGG GGTTTTGTGTT GGTTTTNAAT TGTGAGGAAT AAAAAATNTT CTGCCCACAC 60
 TGGCATTTTA AGGTGACTGA GGTCAAACGT TGTTTCCTTA GGTGAAATA GCAGCCAAAA 120
 CATTCTTNAC GCAGGGGCTT GGGATATGGC TGCTGGCAAC ACATTTTGTGTT GTGGGCTCCT 180
 TAATTTAATG ATAAAATTTA AGCTAAACAC AAGCCAAAAA TGAATAGGTT TTTTNAATTT 240
 TNATTTTTC CTAACAGGC AATTGAAATA CATGGTACAA AAATAAGTGG TAAGATAATT 300
 20 GTAAATGGA AATGGGCAGA NTATTCAATT TTCCATCTAT GNAATTTTC NCATTA AAC 360
 TCATAGNTTT CTTTGNAAA 379

SEQ ID NO:1810
 SEQUENCE LENGTH:358
 25 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02058
 SEQUENCE DESCRIPTION:
 30 GATCNGTTCA GCCCTGAAAA GTCCAACTC CCAGGTATTG TTGCAGAAGG NCGAGATGAC 60
 CTCTATAAAT CAGATGCATT CCATAAGGCA TTTNTTGAGG TAAATGAAGA AGGCAGTGAA 120
 GCAGCTGCAA GTACCGCTGT TGTGATTGCT GCGCGTTCGC TAAACCCCAA CAGGGTGACT 180
 TTCAAGGCCN CCNGGCTTNA AAAAGTTTTT ATAAGAGAAG TTCCTCTGAA CACTATTATC 240
 TTCATGGGCA GAGTAGCCAA CCCTTGTTT AAGTAAATG TTCTTATTCT TGGCACCTCT 300
 35 TCCTATTTN GGTGTGTA CAGAAGTAAA AATAAATACA AACTNNTNNC ATCTCAA 358

SEQ ID NO:1811
 SEQUENCE LENGTH:358
 40 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02059
 SEQUENCE DESCRIPTION:
 45 GATCGTTTCT NATCTCNAAG TNCCTCATG AGNTCGGTGC ATCTGGCCAN TGAGTCTGCT 60
 GAGACTCTTG ACAGCACCTC CAGCTCTGCT GCTTCAACA ACAGTGACTT GCTCTCCAAT 120
 GGTATCCAGT GATTGTTGA AGAGGAGGTG CTCTGTAGCA GAACTGAGC TCCGGGTGGC 180
 TGGTTCTCAG TGGTTGTCTC ATGTCTCTTT TTCTGTCTTA GGTGGTTTCA TTAATGCAG 240
 CACTTGGTTA GCAGATGTTT AATTTTTTTT TTAACAACAT TAACTTGTGG CCTCTTTCTA 300
 50 CACCTGGAAA TTTACTCTTN GAATAAATAA AACTCGTTT GNCTTTGNCT TCTGCAA 358

55

SEQ ID NO:1812
 SEQUENCE LENGTH:344
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02060
 SEQUENCE DESCRIPTION:
 GATCTATACT AGATAATCCT AGATGAAATG TTAGAGATGC TATATGATAC AACTGTGGCC 60
 ATGACTGAGG AAAGGAGCTC ACGCCCAGAG ACTGGGCTGC TCTCCCGGAG GCCAAACCCA 120
 AGAAGGTCTG GCAGNNNTCA GGCTCAGGGA GACTCTGCCC TGCTGCAGAC CTCGGTGTGG 180
 ACACACGCTG CATAGAGCTC TCCTTGAAAA CAGAGGGGTC TCAAGACATT CTGCCTACCT 240
 ATTAGCTTNN CTTTATTTTT TTAACTTTTT GGGGGGAAAA GTATTTTTAA GAAGTTTGTC 300
 TTGCAATGTA TTTATAAATA GTAAATAAAG TTTTACCAT TAAA 344

SEQ ID NO:1813
 SEQUENCE LENGTH:338
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02062
 SEQUENCE DESCRIPTION:
 GATCCAGTAG TAGAGACATC ATCGGTCCAA AAGACTTTGC ATCTCATTAG TTGTCCATAG 60
 TGACTACCAG GAGGTGGCTG GCATCTATAA CGTGTGGGAC GTTTTATGT AAAGAACTGC 120
 CTGTGTTTTT TTTTNAACC AAAGACACTG NCCATAGATT GACTTATACT TTTATAAGTC 180
 TAATTGAAAT ACTTGGGGTA CTATGAAAGG NCTGTNCCTT GNGTGGCTAC GATTAGAAAA 240
 TCAGGNCTAA CAAACTTTTC TTTGTCTGGA NGCATATATA TTTGTGATAT AATTNAATA 300
 TGTATAATTT TGGTTAATA AATCAAATCT ATGCCAAA 338

SEQ ID NO:1814
 SEQUENCE LENGTH:336
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02063
 SEQUENCE DESCRIPTION:
 GATCCATAGA ATGGATACTG GGAGACAATT AGTAGACTTT GCTACAGGTA GCCAATAGCC 60
 CAGCCTGCAG AGTCACGTCA GATATGAAAT CCCAAAGTTC CTCCTGACTA TTGGCAACAA 120
 CAATCACTAA CTGCTACTAC AAAAAGGTAA AACAAAAATG AACTTACACT TTCAAATAT 180
 CATTCAATGA TATTAAACAA ATACTTCTTG AGTGTCTACC CAGTGCCAGA CAGTGGTCTA 240
 GGTTCCTGGA GGTACAGCAT CGTGGGCCAC ATGGTTAGAA GCTGAGTGTT CCTAACAAGG 300
 AGGCTGATTT TGCTGCTCTA CTTTGCACCTG GTTAAA 336

SEQ ID NO:1815
 SEQUENCE LENGTH:335
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02064
 SEQUENCE DESCRIPTION:

GATCTGGATG TGGATGATGC GCCTGGAAC AGTCAGCAGG CAACTCCGAA GACAACGAGA 60
 TAAGCACCTT TCACAACCTC GGGAACGTTT ATTCCCGCT GAAGCTTCTC ACCAGCATGG 120
 CCATCTCGGT GGTGTGCTTC TTCTTCCTGG TGCCTGACT GCCTGGTGCC CAGCACATGT 180
 GCTGCCCTAC AGCACCTGT GGTCTTCCTC GATAAAGGGA ACCACTTTCT TATTTTTTTC 240
 TATTTTTTTT TTTTNGTAAN CCGGNANACC TCCTCCAGCC ATGAGGNNGG GGNNTANCCA 300
 NGTGTNATGT TTNGGAAANN NAAATGGNAT CTTTN 335

SEQ ID NO:1816
 SEQUENCE LENGTH:335
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02065

SEQUENCE DESCRIPTION:
 GATCCATGTG TAATATCACA AGAAATTATG GAAAAATATA ACATAAAATT AAAGTGGACA 60
 AACCAACAAA AGCTTTATTC AAGAACAGGT GACATAGTTG AATTGTGTTG TAAATCTGGA 120
 TATCATCCAA CAAATCTCA TTCATTCGA GCAATGTGTC AGAATGGGAA ACTGGTATAT 180
 CCCAGTTGTG AAGAAAAATA GAATCAATGG CATTACTATT AGTAAATGC ACACCTTTT 240
 CTGAATTAC TATTATATT GTTTCAATT TCATTTTCA AGTACTGTTT TACTCATTT 300
 TATTCATAAA TAAAGTTTG TGTGATTG TGAAG 335

SEQ ID NO:1817
 SEQUENCE LENGTH:334
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02066

SEQUENCE DESCRIPTION:
 GATCTTGATG CGGGACTTCA GTCCTAGTGG CATTTCGGA GCGTTTCAA GAGGTACTA 60
 CCGNNACTAC AACAAGTACA TCAATGTGAA GAAGGGGAGC ATCTCGGGGA TTACCATGGT 120
 GCTGGCATGC TACGTGCTCT TTAGCTACTC CTTTCCTAC AAGCATCTCA AGCAGGANGC 180
 GCTCCGCAA TACCACTGAA GAGGACACAC TCTGCACCCC CCCACCCAC GACCTTGCC 240
 CGAGCCCTC CCGNNGGAAC ACAATCTCA TCGTTGCTGA ATCCTTTCAT ATCCTAATAG 300
 GAATTAACCT CCAATAAAA CATGACTTGG TAA 334

SEQ ID NO:1818
 SEQUENCE LENGTH:328
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02067

SEQUENCE DESCRIPTION:
 GATCCAAACA TGAAAGCTGG AGCTACAAGT GAAGGCGTTC TGGCAAATTT CTCAACAGT 60
 TTGTTGAGTA AAAAGACTGG CTCTCCAGGA GGCCCTGGTG TGAGTGGTGG TAGCCCTGCA 120
 GGTGGGCTG GAGGTGGAAG CAGTGGTTA CCACCATCCA CAAAAAGTC AGGCCAGAAG 180
 CCTGTCTTAG ATGTTTATGC AGAAGTAGAC AGAATTACAC GAAACCAGT TACAGTTTCT 240
 CCCACAACAC CTACATCTCC TACGGAAGGA GAAGCTTCTT GAAGATACCA AATAAGCCA 300
 TTTATTCTGT TTTCTGGNT AATGTAAG 328

EP 0 679 716 A1

SEQ ID NO:1819
SEQUENCE LENGTH:328
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02068
SEQUENCE DESCRIPTION:
GATCGGGGCT GCTTATGCCT TTCGTTTATC CTTGGGGTTT GAGAGCGCTG TATTTGGGAG 60
AGAGTTTAAA AATACATTAG GAGAGAGAAA CCATTAAAAG TTTCAGTGTG AGAGATATTG 120
TAGGTGCTAA TACTGGATTG CGTCTCANAT TTAATTTCTT TNATGGGTCT GTTAGTCATT 180
CANCAAATCC CATAAGTATG TGTAAATATT TNAATTGTGT AAAACTCATT TGTTACTTTA 240
CAGCCTGTAA TAGTGTGTCT GCATTTNCAA CCTGTTGCAA TAACTTTNCT GAAATATTAA 300
CACATTAATA AAACTTTCT TAAACAAA 328

SEQ ID NO:1820
SEQUENCE LENGTH:328
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02069
SEQUENCE DESCRIPTION:
GATCAGAGAA GAGGCTACTG GGGGAGAATT CAGTGCCCCC TTCGCCCTCT AGGGNGCAGA 60
CCTCCACTGC CATTGTCCTG TNAGCCGCCA AANACCCAC GGGGTGCCCG CATGTCCCTG 120
TCTANNNGCA GCCCAGGGCC CCCACTCCTG GCTCCTNACA CTTGCCTCCC CTATGGCCGC 180
TCTCCAGACC CTCCTCCTTT CTTCTCCCCA CATCCGCACC TGCTGTTCCC ACTCTGGGGT 240
TCTCAAGTCC ATGAACAGAT ATTGTTGCAT TTTCCACAAT GCTGATTAAA CATAATAAAC 300
AATCCAGAAA AGCAGTTTTG CCCAGAAA 328

SEQ ID NO:1821
SEQUENCE LENGTH:319
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02070
SEQUENCE DESCRIPTION:
GATCCAAAAG CCAGTCTCAG GAGTTTACCC CTGGGATGGG GGATGCATCT NCACCTGACT 60
TTGGGGCCAC GTGCCCTGTG GCACCCAGC TCACTGGGAG TCTCAGGAGG GATAACCGGA 120
TTTNTGCTCT TTCCCTGTG ACTCCACAT CACACAGAAA AATGGCATTG CTCTCTGTCT 180
CTCCCTGGCA TGGAGAGGGC AGACTGTGCA CATTTCATA GGGTCCAAAT ACAGAAAGGC 240
CCAGGGCCCA GGGGCTTGCA GCTTCGTGAG GGGTCTCTGG CCCAGTTTCC AATGAATAAA 300
GTTCTCTTGA CAGCTCAA 319

SEQ ID NO:1822
SEQUENCE LENGTH:315
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02071

SEQUENCE DESCRIPTION:

GATCATCAGA TGGTCGAGTA CTCTTGAAT GTCTCTTTGC TGTTTACTGT GGCCTCTTTA 60
 CAATGGTGAG ACTTATTCT ACCCTCTACT TTCCACTATT ATTNTTTTCC CCTATTGGAT 120
 AATACTAGTC TGAGCAGCCC TAATACTAGA TGTACCTAAA CAGAGATACA AGCCAAGTCA 180
 TTGTTCAAGT TAGTCATTTC TTAGTATCTG TTTATATTTT GTCACACATC AGAATGTATA 240
 TTTTATAGAG CATGTGTTTG TCTACTNGTT TGTCTACTAT AATATGTCTT TAATAAAGCT 300
 AAAANCATTG TGAAG 315

SEQ ID NO:1823

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02072

SEQUENCE DESCRIPTION:

GATCGCTTTT TTGCCGCTCA TATTTGAATG CATTGGGTTT CCTGGACCAG CTATTTGCAC 60
 AAGACTAGGG GGAGGTTGAG GGTGGCATA GCAGGCAGGG GCTGGGATAG ACATTCAACC 120
 TAGCTNNNT TCATGCTCTT AAGGCTTTAT TTTCTAGAA TGCCAAGAAA CCAACTTTCT 180
 TTAAACATGA CTCATCTCTT CGATTTTCTT GTATAGGTCT TCCTCCACC CCAAATCTAC 240
 ACTTGTTAGA AACAGAATAA TTACCTTTGC TTAATCCATT ATCAACACTT GGAGATAGAG 300
 ACTTTACACT TCAGN 315

SEQ ID NO:1824

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02073

SEQUENCE DESCRIPTION:

GATCGAAAAG GGACCCTGCT TCCAATTTCC CTCTTCATT CCTCGAGCTA CTCCAGGGCT 60
 TAGAAGAATG CTCTGGTCT GTGGGTCCAG TGTGTCTGT CATCCATTTA AGTGTTCCTA 120
 CTTTCAAGTG ACAATCCTCT CTTGGCCCT GCCATAGGGC AGAGCATGTN TGGCATAGCA 180
 GCCTGACTTT NATGCCCTAA TCTTGAGTTG AGGAAATATA TGCACAGGAG TCAAAGAGAT 240
 GTCTTTATAT CTGACTGTAT ATAAATGAAG TTTTNGTT TTTTNGTT TCCTTTTGG 300
 TGAATAAAG TTTGTTTGG CAGAAGGAGA AA 332

SEQ ID NO:1825

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02074

SEQUENCE DESCRIPTION:

GATCAAGGCG CGGACGCTAT CTACGACCAC ATCAACGAGG GGAAGCTGTG GAAACACATC 60
 AAGCACAGT ATGAGAACAA GTAGTTCCTT GGAGGCCCCC ATCCAGGCCA GAAGGACCAG 120
 GTCCACCCAG CAGCTGTTTG CCCAGAGCTG GAGCCTCAGC TTGAAGATGA TGCTCAAGGT 180
 ACTCTTCATG GACCACCATT CGCTGTTGGC AAGAAACGGC TTTACTTACA AAACAGACTC 240
 TTTACCTTCT GCTGTGTTG AAGTATGTTT AGTCAGCATG CTCAGGAAAT AAATGTGAAT 300

TGCCCTTGAA A

311

SEQ ID NO:1826

SEQUENCE LENGTH:309

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02075

SEQUENCE DESCRIPTION:

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 GATCTAGTGT TTGGAACGGA CGTTACCTGC TGGTTTGTGC ACAACAGTGG AAAAGGATTC 60
 ATTGACGGGC ATTACAAGGA TTACTTCGTG CCTNAGCTCT ACAGCTTTCT CAAACGGCCT 120
 TAAAGGTTTA TAGTTTGGGA AATTATATAT TATTATACAT CTTTCCCTG TCACTTTTGC 180
 AGATATTCTT CGGTNCCNAT AATTAAAATG AACCAGATAT CAGGGTGGTT AATTAAAATG 240
 AACCAGATAT CAGGGTGGTT TATAAAGCCT GTAAACACAC CTNAGAAAAT ANACATTTTA 300
 CANATGAAA 309

SEQ ID NO:1827

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02076

SEQUENCE DESCRIPTION:

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 25
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 A
 GATCATGAAT AACTGATTAG TAAGTCTTGC CTATATTTTC CTGATAGCAT ATGACAAATG 60
 TTTCTAAGGT AACAGATGA GAACAGATAA AGATTGTGTG GTGTTTGGGA TTTGGAGAGA 120
 AATATTTTAA TTTTAAATG CAGTTACAAA TTATAATGTA TTCATATTG TACTTTCTGT 180
 TAAATGCAT GATTGCAGAA TTGTTTAGAT TTTGTGTTTA TTCTTGATGA AAAGCTTTGT 240
 TTGTTCTTGT TTTTAAGTTT GCACTCAAAT CTTAAGAAAT AAATCCACCC ATGTTATCAA 300
 A 301

SEQ ID NO:1828

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02077

SEQUENCE DESCRIPTION:

35
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 45
 GATCAGTGAA CTCTGGTTTT AAGATAATCT GAAACAAGGT CCTTGGGAGT AATAAAATTG 60
 GTCACATTCT GTAAAGCACA TTCTGTTTAG GAATCAACTT ATCTCAAATA GTAACTCGGG 120
 GCCTAACTAT ATGAGATGGC TGAaaaaaATA CCACATCGTC TGTTTTCACT AGGTGATGCC 180
 AAAATATTTT GCTTTATGTA TATTACAGTT CTTTTTAAAA CACTGGAAGA CTCATGTTAA 240
 ACTCTAATTG TGAAGGCAGA ATCTNTGCTA ATTTTTCAGA TAAAAATTCT CTTTGAAA 298

SEQ ID NO:1829

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02078

SEQUENCE DESCRIPTION:

GATCCCTTAT CCAACATGGT TCTAACCTTC AGTACTAAAG AAGATGCAGT TTCCTTTGCA 60
 GAAAAAATG GATGGAGCTA TGNCATTGAA GAGAGGAAGG TTCCAAAACC CAAGTCCAAG 120
 TCTTATGGTG CAAACTTTTC TTGGAACAAA AGAACAAGAG TATCCACAAA ATAGGTTGGC 180
 ACTGACTATA TCTCTGCTTG ACTGTGAATA AAGTCAGCTG TNCAGTATTT ATAGTCCATG 240
 TATAATAAAT ACATCTCTTA ATCTCCTAAT AAATTGGACC TTAAACTAC AAA 293

SEQ ID NO:1830

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02079

SEQUENCE DESCRIPTION:

GATCANNATT TGAAGGNT TTCTAGAAAT TNGGGGTAAG AAGTACTACC AAAATGTAAC 60
 TNCTAATCAA GGGTGATGCA CAGCAAAAGC AATGGACCCC ATCCCTCTAA AGCCTGCCCT 120
 CCTTTGCCTT CAACTGTATA TGCTGGGTAT TTCATTTGTN TTTTATTTT GGAGAAAGCG 180
 NTTTTAACTG CAACTTTCTA TAATGCCAAA NTGACACATC TGTGCAATAG AATGATGTCT 240
 GCTCTAGGGA AACCTTCAA NGCANTAAAA ATGCTGTNTT GAAATGCCAA A 291

SEQ ID NO:1831

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02080

SEQUENCE DESCRIPTION:

GATCTGGGCC TGAATAAGGG TTATCGAATG GTGGTGAATG AAGGTTGAGA TGGTGGACAG 60
 TCTGTCTATC ACGTTCATCT CCATGTTCTN GGAGGTCGGC AAATGCATTG GCCTCCTGGT 120
 TAAGCACGTT TTGGGGATAA TTTTCTCTC TTTAGGCAAT GATTAAAGTA GGCAATTTCC 180
 AGTATGTTAA GTAACACACT TATTTTGCC TGTNTATGGA GAGATTCAAG AAATAATTTT 240
 AAAACCGCAT ACATAATAAA AGACATTGTT GCATGGCTTA TAGTCAA 288

SEQ ID NO:1832

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02081

SEQUENCE DESCRIPTION:

GATCCAGCCT TAATNTTTT CTGACATCCT AGTAATAGCA GACCCTGCAC AAAGTGGATA 60
 TCAGACTTAA TACTGTNAGG AGACAAAATA ATGAGAATAG TTTTACCAA GATAATNAAA 120
 TCTCGCATCA TGTCTGCATT TTACCATAGA TTGGAGTGCA TCCTAGGAA ACTGAATGTA 180
 AAAAAAACC AGGACATTTT TGGAAATTGT ATGCTCTCTA GCAACTTTGT GTGAATTTTT 240
 ATACAAACAC TGTCTATGA GTTATATAAA ATGTTATAAA ACTAGAAA 288

SEQ ID NO:1833

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02082

SEQUENCE DESCRIPTION:

GATCCTGAGA ACTTCAGGCT CCTGGGCAAC GTGCTGGTCT GTGTGCTGGC CNNNCACTTT 60
 GGCAAAGAAT TCACCCACC AGTGCAGGCT GCCTATNAGA AAGTGGTGGC TGGTGTGGCT 120
 AATGCCCTGG CCCACAAGTA TCACTAAGCT CGCTTTCTTG CTGTCCAATT TCTATTAAAG 180
 GTTCCTTTGT TCCCTAAGTC CAACTACTAA ACTGGGGGAT ATTATGAAGG GCCTTGAGCA 240
 TCTGGATTCT GCCTAATAAA AAACATTAT TTTCAATTGCA AGAAA 285

SEQ ID NO:1834

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02084

SEQUENCE DESCRIPTION:

GATCTCATGG GCTTCCCTG GAGGAAAGGT TTTTTTGTG TTTTTTTTT NAAGAACTTG 60
 AAACTTGTA ACAAGAGATG TCTGTAGCTT TTTNCCCAT CTGTAGTGTA TGTNAAGATT 120
 NCAAAACCTG AGAGCACTTT TCCTTTGTTT AGAATTATGA GAAAGGCACT AGATGACTTN 180
 AGGATTNCA TTTNCCCTT TATTGCCTCA TTTCTTGTGA CGCCTTGTTG GGGAGGGAAA 240
 TCTGTTTATT TTTNCCTACA AATAAAAAGC TAAGATTCTA AA 282

SEQ ID NO:1835

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02085

SEQUENCE DESCRIPTION:

GATCTTAAGC TTTGATAAGA GCTGTGCTGT GGCTGAGTAT GGTGTGTATG TGAAGGTGAC 60
 TTCCATCCAG GACTGGGTTC AGAAGACCAT AGCTGAGAAC TAATGCAAGG CTGGCCGGAA 120
 GCCCTTGCCT GAAAGCAAGN CTTCAGCCTG GAAGAGGGCA AAGTGGACGG GAGTGGACAG 180
 GAGTNGATGC GATAAGATNN GGTTTGAAGC TGATGGGTGC CAGCCCTGCA TTGCTGAGTC 240
 AATCAATAAA GAGCTTTCTT TTGACCCAAA AAAANTAAA 279

SEQ ID NO:1836

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02086

SEQUENCE DESCRIPTION:

GATCCATAGT GCTACCTGCA CCTCTGGATT CTGGATTCAC AGACCAAGTC CAAGCCCGTT 60
 CTTACGTCGC CATAAAGGCC CCCGAACGGC ATTCTCGGTA CTTCTGTTTG TTTTGTGACA 120
 TTTNATTAGA AAGGACTGTA AAATAGCCAC TTAGACACTT TACCTCTTCA GTATGCAAAT 180
 GTAAATAAAT TGTAATATAG GAAATCTTTT GTTTTAATAT AAGAATGAGC CTGTCCAATT 240
 TCTGCTGTAC ATTATTAATAA GTTTTATTTC ACAA 275

SEQ ID NO:1837

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02087

SEQUENCE DESCRIPTION:

GATCCGAAGA GGAAGCTCTG GTCATCTTTA ACAAGAAAAT CAGCAAGAAC CCTACCTTTA 60
 AGTTATTAAA GGACAAAAGTC AAGCTTGTGA AATGAACATT TGTGTATTTA AAANTTGAAT 120
 CCATTCTGCT GACTTCTTAC TTTCAGTGCT GTTTATAAAA TGTGTAATGA ATTCTAACAA 180
 CTCAAATTTT GCTTTTGGAC GCNGTATTTT TANGTTANGN AAATATATTT NTGGTATAAC 240
 TTTTATGCGA NAAATAAAAT ATATTCTGN 269

SEQ ID NO:1838

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02088

SEQUENCE DESCRIPTION:

GATCTCATTG TTTATTAACC TGTATTCTGT TTACATGTCT TTAACACAGT GGTCTTAAA 60
 TTGTAAGCTC AGGTTCAAAG TGTGGTAAT GCCTGATTCA CAACTTTGAG AAGGTAGCAC 120
 TGGAGAGAAT TGGAAATGGGT GCGGGTAATT GGTGATACTT CTTTGAATGT AGATTCCAA 180
 TCACATCTTT AGTGTCTGAA TATATCCAAA TGTTTtagga TGTATGTTAC TTCTTAGAGA 240
 GAAATAAAGC ATTTTGGGA AGAATAAA 268

SEQ ID NO:1839

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02089

SEQUENCE DESCRIPTION:

GATCTATCTA AATATATTAA GTAAAATTAC ACCATTCACT TGTGGGAAA ATAATCTTTG 60
 GTTTGGAAGA TATTAACATA ATGGGCATCT TAGAATCATA AATCACATGA AATGAGAGAC 120
 AATGCAATAT TGTATAATTC CTGGATGATG CAATTGTTTT AATTGANITT TCAAGTGCCA 180
 TTATAAAGTT TAAAAATTA TCAATATGAG TTGGTGCCTA ATTTTNNNTT TCCTAAAAAT 240
 AAAATTTTTC CTTTTATGA GTAAA 265

SEQ ID NO:1840

SEQUENCE LENGTH:261

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02090

SEQUENCE DESCRIPTION:

GATCATAAAA CCTTCATTCC ATAGGTACCC TTTATCCTCA CAGATACAGA GACACCAAGA 60
 AGAATCTGGA CAAATAGGAC TTGCTAAGTT CTCCACAGTT TATTACCATT AGATTATGTC 120

CTTTTGTNCT CTGATTATAC TTCTGCATAA GACTGTACAT AAAANTACAC AAGTTTTCCT 180
 ATTTNTTTTT TGTCTTCATT TCTGAAGATT CCTGTCATGT AAAACTTACA GTAAATAAAT 240
 GTGTGTGCTT TTNTCAATAA A 261

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SEQ ID NO:1841
 SEQUENCE LENGTH:263
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS02091

SEQUENCE DESCRIPTION:

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GATCAGGTTA GGGCGAGCGC TACCTCTCCA GCCTCAGCTC TCAGTTGCAG CCCTGCTNAT 60
 GCCTGCTTGG ACTTGGCCCC TGCCACCTCC NGCCTCAGGT GTCCGCTATC CACCAAAAGG 120
 GCTCCCTGAG GGTCTGGGCA AGGGACCTGC TTCTATTAGC CCTTCTCCAT GGCCCTGCCA 180
 TGCTCTCCAA ACCACTTTTT GCAGCTTTTT CTAGTTCAAG TTCACCAGAC TCTATAAATA 240
 AAACCNGACA GACCATGAAC AAA 263

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SEQ ID NO:1842
 SEQUENCE LENGTH:264
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS02092

SEQUENCE DESCRIPTION:

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GATCAGAAAG AAACCTTTTG TAGCAATATC AAGAATCTAG TTTCATCTGA GAACTTCTGA 60
 TTAGCTCTCA GTCTTCAGCT CTATTTATCT TAGGAGTTTA ATTTGCCCTT CTCTCCCAT 120
 CTTCCCTCAG TTCCCATAAA ACCTTCATTA CACATAAAGA TACACGTGGG GGTCAGTGAA 180
 TCTGCTTNAN NATCCTGAAA GTTCTCTGGG CTTAAGATTC CAGACTCTGA TTCATTAAAC 240
 TATAGTCACC CGTGCCTGT GAAA 264

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SEQ ID NO:1843
 SEQUENCE LENGTH:246
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS02093

SEQUENCE DESCRIPTION:

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GATCAAAATGT CACACAGCAG TTTCCTTGCA ACACTTTCAG CTCCCCATGC TCCAGAATAC 60
 CCACCCAAGA AAATAATAGG CTTTAAACA ATATCGGCTC CTCATCCAAA GAACAACTGC 120
 TGATTGAAAC ACCTCATTAG CTGAGTGTAG AGAAGTGCAT CTTATGAAAC AGTCTTAGCA 180
 GTGGTAGGTT GGGAAGGAGA TAGCTGCAAC CAAAAAAGAA ATANATATTC TATAAACCTT 240
 CAGAAA 246

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SEQ ID NO:1844
 SEQUENCE LENGTH:243
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS02094

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SEQUENCE DESCRIPTION:

GATCTGTGTG CATGTNTGTG TTTGTGTATA TATACATATC TAGGGCTAGT ACTTAGTTTC 60
 ACACCCGGGA GCTGGGAGAA AAAACCTGTA CAGTTGTCTT TCTCTNATT TNAATAAAAT 120
 AGAAAAATCG CGCACTTGCG GTCCCCCCCC CACCCCTTT TTTAAACAAG TGTTACTNNN 180
 NCCGGGAAAA TTTTNCGTGC TTTGTAATTT TAAACTTTA AAATAAATTG GAAAAGGGAG 240
 AAA 243

SEQ ID NO:1845

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02095

SEQUENCE DESCRIPTION:

GATCTAGTGA ACATTCGACC TCCATTACGG AGAGTTTCCT ATGTTTCACT GTGCAAATAT 60
 ATCTGCTATT CTCCATACTC TGTAACAGTT GCATTGACTG TCACATAATG CTCATACTTA 120
 TCTAATGTTG AGTTATTAAT ATGTTATTAT TAAATAGAGA AATATGATTT GTGTATTATA 180
 ATTCAAAGGC ATTTCTTTTC TGCATGTTCT AAATAAAAAG CATTATTATT TGCTGAGAAA 240

SEQ ID NO:1846

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02096

SEQUENCE DESCRIPTION:

GATCTAAGCA GCGTTCCAC AGCCCCCTCT AGATTCTTGG AGTTCGCAG AGCTTACTAT 60
 ACGCGGTCTG TCCTAATCTT TGTGGTGTTC GCTATCTCTT GTGTCAAATC TGGTGAACGC 120
 TACGCTTACA TATATTGTCT TTGTGCTGCT GTNTGACAAA CGCAATGCAA AAACAATCCT 180
 CTTTCTCTCT CTTAATGCAT GATACAGAA TAAATAAGA NTTTCATCTT TAAATGAAA 239

SEQ ID NO:1847

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02097

SEQUENCE DESCRIPTION:

GATCCATCCT CTCTCCTAGC TGAGTAAATC CGGGTCTCTA GGATGCCAGA GCAGCGCACA 60
 CAAGCTGGGA AATCCTCAGG GCTCCTACCA GCAGGACTGC CTCGCTGCCC CACCTCCCGC 120
 TCCTTGGCCT GTCCCAGAT TCCTTCCCTG GTTGACTTGA CTCATGCTTG TTTCACTTTC 180
 ACATGGAATT TCCCAGTTAT GAAATTAATA AAAATCAATG GTTCCACAA A 231

SEQ ID NO:1848

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02098

SEQUENCE DESCRIPTION:

GATCCAAAAT GCTGACAGGT TCAAACAAAA TTGGAATTGA AAATCAGAGT GCGTTCAAGA 60
 GTATCAAAACA ATACTATCTT GTTACTTGCT TATTACCTTA GTAGACTGGA AGCAACACTT 120
 CACACAAAAA AAGGGTTTGG ATGTAATTC GGATAAGAAG AGATGTTTCT GTAAAGTCTT 180
 TCCTGAGANG CATATTATT GAGAAAAACA CATATTTCTG TTTTAGTAA A 231

SEQ ID NO:1849

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02099

SEQUENCE DESCRIPTION:

GATCTACCAT GTAAATGTT GTAGAGATAG AGCCATATAA CGTCACGTTT CAAAAC TAGC 60
 TCTACAGTTT TGCTTCTCCT ATTAGCCATA TGATAATTGG GCTATGTAGT ATCAATATTT 120
 ACTTTAATCA CAAAGGATGG TTTCTTGAAA TAATTTGTAT TGATTGAGGC CTATGAAC TG 180
 ACCTGAATTG GAAAGGATGT GATTAATATA AATAATAGCA GATATAAA 228

SEQ ID NO:1850

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02100

SEQUENCE DESCRIPTION:

GATCTACCGG CCCCGCTGGG GTGCCCTTGG GGACTACCTC TCCTTCACCA TACCCCTGGG 60
 CACCCCTGTA CAACTTCTGC ACATACTGGG GCCCTGCTTA TTNTCCAGG ACAGGCTCCT 120
 TAAAGCAGAG GAGCCNGTNC TGGGAGCCCC TTCTCAAACCT CCTAAGACTT GTTTTCATGT 180
 CCCACGTTCT CTGCTGACAT CCCCAATAA AGGACCCTAA CTTTNGGNNN TNNA A 236

SEQ ID NO:1851

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02101

SEQUENCE DESCRIPTION:

GATCTATGGT TTCTGCCTAC CCAGGATAGT CTTGTCTCTA GACAATGTAT TGATGATGCA 60
 AATGTTCTGG AACTAAATAG TGGTGATGGT GGCACAACAC TGTGAATGTA CTAAATGTCA 120
 CTGATTTGTA CGTATTTAAT ATGAATTAAA TGTTAAAATG GTGAATTATA TTTATGTATA 180
 TTTNACCATA ATAAAAATAT GCATTGGAAG ATGCATTTTT TGTGAAA 227

SEQ ID NO:1852

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02102

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCTTTGGA CCAGTTTCTA GCAAAGTTGT GTTTGAAAGA TACTCTATTA AAGAAGACTG 60
 TGGAATCTTT TTATCGGTGC CCATTATATC CTTAAGTTTG GATATTTAGC TGACCTTCGC 120
 TTTAACATAG GTCTAATTTA TTTGCCGTGT CATTTTCCAT ACAAATCAGT TGATTTAAAA 180
 AAGTTCATTT CTCATACTGT GCATTAAAAA AAAAATTGA ACAATTTAA 229

10 SEQ ID NO:1853
 SEQUENCE LENGTH:224
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02103
 SEQUENCE DESCRIPTION:
 15 GATCTCTGT TTTTTCAGG CTCCTAAAGT AACATCAGCC ATNTTNAGA TTGGTTCTGT 60
 TTTCTACCT TCCCACTGGC CTCAGTGAG CCAAGAAACA CTGCCTGCCC TCTGTCTGTC 120
 TTCTCCTAAT TCTGCAGGTG GAGGTTGCTA GTCTAGTTTC CTTTTTGAGA TACTATTTTC 180
 ATTTTGTGA GCCTCTTTGT AATAAAATGG TACATTTCTA TAAA 224

20 SEQ ID NO:1854
 SEQUENCE LENGTH:223
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS02104
 SEQUENCE DESCRIPTION:
 GATCAAGGCC GGACCCCACT GCCCACTGC CCAACTGATA GCCACGCTGA NNGAATGGAA 60
 GGAAAATTG CTTGGACCTG CAAGCCCCGC TGTACAAGAA AATAATTAAG AAACTTTGG 120
 AGAGTTAGCT ACTAGCTGCC TACGTGTGTN CATTTGCTAT ATAGCATACT TCTTTTTTCC 180
 30 AGTTTCAATC TAACTGTGAA AGAAGTTCTG ATATTTTGTG TTN 223

35 SEQ ID NO:1855
 SEQUENCE LENGTH:227
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02105
 SEQUENCE DESCRIPTION:
 40 GATCCTAGTA ATTGCCTAGA AATATCTTTC TCTTACCTGT TATTTATCAA TTTTCCCAG 60
 TATTTTATA CGGAAAAAAT TGTATTGAAA AACTTAGTA TGCAGTTGAT AAGAGGAATT 120
 TGGTATAATT ATGGTGGGTG ATTATTTTTT ATACTGTATG TGCCAAAGCT TTACTACTGT 180
 GGAAAGACAA CTGTTTAAAT AAAAGATTGA CATTCCAAAA AAACAAA 227

45 SEQ ID NO:1856
 SEQUENCE LENGTH:219
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02106
 50 SEQUENCE DESCRIPTION:
 GATCTATACA AAGTCTTTGA GAGGTGTTAA ATATGTTTAT TTATGCACTG TGGGATGTGT 60

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TCTTCTTTCT CTGTATTCCG ATACAAAGTG TTGTATCAAA GTGTGATATA CAANGTGTAC 120
 CAACATAAGT GTTGGTAGCA CNTAAGACTT ATACTTGCCT TCTGATAGTA TTCCTTTATA 180
 CACAGTGGAT TGATTATAAA TAAATAGATG TGTCTTAAA 219

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SEQ ID NO:1857
 SEQUENCE LENGTH:219
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02107

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SEQUENCE DESCRIPTION:
 GATCAAGAAA GACAAAAAGC CAGCCTGCAG CAAGCACTTT GGAGAGCAAA TCTGNAAAGA 60
 GAGTAACGCG GAGTGTCAAG AGGTGTGCAG AAAATCCAAA GAAGGCTGAG GACAATGTGT 120
 GTGTCAAGAA AATAAGAAACC AGAAGTCATA GGGACAGTGA AGATATTGA CAGAAAAATC 180
 GAACTGGGAA AAATATAATA AAGTTAGTTT TGTGATAAA 219

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SEQ ID NO:1858
 SEQUENCE LENGTH:219
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02108

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SEQUENCE DESCRIPTION:
 GATCTGTCCG AACCAGGACA CAAAAGCAGC AAGAAGCGGG GAGAGAGAGG GATAGAAAAC 60
 AAGCGCAGGA GAGCCTGCGA ACGCAAAANT GAATGAGGGC TTTTGTGGC TGGGGATGGG 120
 TTTTGTTTTT GGGGTTTTT TTTTNAATTT GTTTGACTT CGTACAGGGT ACTTTTTCCC 180
 AACCTCATCT NTCAGAAATC CATGTGGGNT TCCTGGAAA 219

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SEQ ID NO:1859
 SEQUENCE LENGTH:217
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02110

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SEQUENCE DESCRIPTION:
 GATCTGAAGA AATTACCAAA CATTAAATG AGANAAATTT GCGCTAATGA TGCAATTCCC 60
 AAGACGTGCA AGAGGAAAAC TATTATAACT GTAGACCAAG ATTTGGGGGA ATTGGAACTA 120
 AACGATGAAT CAAGTGATTC AGATGAGGAA ATGACTGCAG TGGCCTAATT GTCTTCACTT 180
 GAATTGAAAA TAAATAATTT GAGAGCTTCA AATTAAA 217

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SEQ ID NO:1860
 SEQUENCE LENGTH:216
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02111

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SEQUENCE DESCRIPTION:
 GATCCATTTT TTTAAAATAC TGACATATAG AGTTGTACCT TATATAGAAT ATAGTTGTAT 60
 CTTGAAGTCA ACATATTAAA TTATTCTCAA AATTATGTAT TTNCAGATTG TACTTGTAAG 120

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TTTCAAAGAA AAATTACCGT CTTTTCATAT TGACCTGGAA ACTAAATAGG ATGTGATTCA 180
GCTACATTAA TTTCTTAATA CAATCTAGGA AAGAAA 216

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SEQ ID NO:1861
SEQUENCE LENGTH:213
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02112

SEQUENCE DESCRIPTION:

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GATCCTTTTC TTGAAAGAAT AACAGAAAAT GTGTCATCCA TTTTTCAGAA TATAACCACT 60
CAAGCTACTG GCACATAGTG AAAGATTACT TCTGACATTC CATTNCTCTT CTTTGGAAAA 120
TTAGTATNGT AATTAAATGT ACTTTTGGAA AATTAATAGA ATTATTTAAA TTACAGTATA 180
TGTNGCAAAA TATATCACTT TTGATACAAT AAA 213

SEQ ID NO:1862

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SEQUENCE LENGTH:210
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02113

SEQUENCE DESCRIPTION:

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GATCTATCTC ATCAAACAAC ACAATGAAGA TATTTTAGAG TACAAAAGAA GAAATGGGCT 60
GGAATAAACT TTTGAAACAC TAATGTAGTA TGCTCCGTAT AGTGATTGTA GCTGTTCCCTC 120
TGGATTCAAC ATCTGTTGAG TTGTAAATGT GNGANAAAAA GTTATATGTG AATATATATC 180
AAGCCAGCAT TTGTATTTTG CATCATTAAT 210

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SEQ ID NO:1863
SEQUENCE LENGTH:209
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02115

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SEQUENCE DESCRIPTION:

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GATCGGGGCT GCCAGAGGGN TAGAAGCGAG GGCACCAGCA GTTGTGGGTG GGGAGCAANG 60
GAAGAGAGAA ACTCTTCAGC GAATCCTTCT AGTACTAGTG GAGAGTTTGA CTGTGAATTA 120
ATTTTATGCC ATAAAAGACC AACCCAGTTC TGTTNNNNC TGTAGCATCT TGAAGAAAA 180
AATTATAATA AAGCCCCAAA ATTAAGAAA 209

SEQ ID NO:1864

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SEQUENCE LENGTH:208
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02116

SEQUENCE DESCRIPTION:

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GATCTGGAGC AACAGCTAGG AAATATCATT AATTCTGCTC TTCAGAGATG TAAAAATAA 60
ATTACACGTG GGAGCTTTCC AAAGAAATGG AAATTGATGG GAAATTATTT GTCAAGCAAA 120
TGTTTAAAT CCAATGAGA ACTAAATAAA GTGTTGAACA TCAACTGGGG AATTGAAGCC 180

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AATAAACCTT CCTTCTAAC CATTCAAA

208

SEQ ID NO:1865

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02117

SEQUENCE DESCRIPTION:

GATCTATACT TAGAATGCAA TGTNGACAGA GGGCAGTTAA AATATCCAAG ATGTATTCCA 60

AGACAAAGCA AACAAACAAC TGGAAGTGGT AATCAATTCA ACAGGCCTTC TGAATTNTCT 120

GAAGCNAAAG CAACGTTTGC CATNNGATAT TTGTGACACT TTGGCAAATG GAAAAATAAA 180

CCAATTTATA CGTGAATAA A 201

SEQ ID NO:1866

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02118

SEQUENCE DESCRIPTION:

GATCATGAAG GTATCCACAC TTCCCCTTGC ATTCCTTCT TAACTCTCTG TTACACGTCA 60

TTGAAACTAC ACTTTTTTGG TCTGTTTTG TGCTAGACTG TAAGTTCCTT GGGGGCAGGG 120

CCTTTGTCTG TCTCATCTCT GTATTCCCAA ATGCCTAACA GTACAGAGCC ATGACTCAAT 180

AAATACATGT TAAATGGAAA 200

SEQ ID NO:1867

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02119

SEQUENCE DESCRIPTION:

GATCACATTT TGAAATGCCT AAAAGACTTT ATTGTTCTAA TTATCCAGAT GTACCTTTGT 60

AAAATAGCTC TTTTATGAAT TAGCTGATAA GGCTGTATGT TTCTGGAACA AAATATTGGT 120

CATCTAAAN CTTTCTGTTT NCTGGGGTCT GGGAAAATAG AAAATAAGAT TTCAATATT 180

AAATAAGCTT AANGGCACCA AA 202

SEQ ID NO:1868

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02120

SEQUENCE DESCRIPTION:

GATCAGGCCC TTCTCCAC AGCAATAGTC CCCAATACGT AGATTTTGC TCTTCTGTAT 60

GTGACAACAT TTTTGTACAT TATGTTATTG GAATTNCTT TCATACATTA TATTCCTCTA 120

AAACTCTCAA GCAGACGTGA GTGTGACTTT TTGAAAAAG TATAGGATAA ATTACATTAA 180

AATAGCATAT GATTTTCAAA 200

EP 0 679 716 A1

5 SEQ ID NO:1869
 SEQUENCE LENGTH:194
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02121
 SEQUENCE DESCRIPTION:
 GATCTNTNTG TTCATTGTAT TCTTTTNTC TCAAGAGTTC CATTTAATGG AAATAAAACG 60
 GTATAATTAA TAATTGTCTA GGGGGGAAAA ATGAAGCAAA TNTCATTGGA TATTTTAAAA 120
 10 GGTCTCCACA GAGTTTATGC CATATTGGAA TTTTGTGTA TAATTGTCAA ATAAATATTT 180
 TGGTGANGCA TAAA 194

15 SEQ ID NO:1870
 SEQUENCE LENGTH:190
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02122
 SEQUENCE DESCRIPTION:
 20 GATCCAATAC TATTTAGTTT ATTATTGAAA TTGGAAGGAT TCATTGAGCA GCATAGAAGT 60
 TTGTTTACAT GTTACTTGA GATGCTAGGT ATTTGTGGAA TAAAAAGAA TCAGGCTCTT 120
 TTGTACTNAN TTTTAAATC TGTGATGCTT NTCAAATTTA ATTCATAATA AATTGATGCA 180
 ATTCATAAA 190

25 SEQ ID NO:1871
 SEQUENCE LENGTH:188
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 30 CLONE:HUMGS02123
 SEQUENCE DESCRIPTION:
 GATCGAACAG TTTTGAAGCT ACTGTGTGTG TGAATGAACA CTCTTGCTTT ATTCCAGAAT 60
 GCTGTACATC TATTTTGGAT TGTATATTGT GTTTGTGTAT TTACGCTTTG ATTCANNAGT 120
 AACTTCTTAT GGAATTNATT TGCATTGAAC ACAAACTGTA AATAAAAAGA AATGGCTGAA 180
 35 AGAGCAAA 188

40 SEQ ID NO:1872
 SEQUENCE LENGTH:184
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02124
 SEQUENCE DESCRIPTION:
 45 GATCCTATTT ATTTGTTTAG GCCATCTTTA ATTTCTTTCA GCAGTGTTTT GTAGTTTCCA 60
 TTAGAGATTT TCCATGTCNT TTGTTAAGTT TATTCCTAGG TATTTATTT TTTATGGTAT 120
 TNTATTATAA TCCTNNGATG TCTATTATAT AGAAATATAA TTNATTTTNG TTATTGACTG 180
 NNNN 184

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55

EP 0 679 716 A1

SEQ ID NO:1873

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

5

TOPOLOGY:linear

CLONE:HUMGS02126

SEQUENCE DESCRIPTION:

10

GATCCAAGTN CTGACTTTTC CCCCTGACAG CTGTGTGACC TTCGTGAAGT CGCCAAACCT 60
 CAAATGAGCC CCAGTCATTG CTAGTAAGAC CTGCCTTTGA GTTGGTATGA TGTCAAGTT 120
 AGATAACAAA ATGTTTATAC CCATTAGAAC AGAGAATAAA TAGAACTACA TTTCTTGCAA 180
 A 181

SEQ ID NO:1874

15

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02127

SEQUENCE DESCRIPTION:

20

GATCTTAAAT TTTCTCATCT CAAAAAATA TGTAAAGTGA TAGATATGTT AAATAGCTNN 60
 TATGTATTTT GCAATGTGTA GTGTATATAT ATAAACATCA CACAGTACAC CATAAATATA 120
 TTTAATTTTT GTCAATTACT CTTTAAACCT TAATAAAGTT GATAAAACAT TCTTTTTTAA 180
 A 181

25

SEQ ID NO:1875

SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02128

SEQUENCE DESCRIPTION:

35

GATCAGGTTA GCAAATGATG TAAAGAAGC TTTATTGTCT AGTTGTTTTT TTTCCCCCAA 60
 GACAAAGGCA AGTTTCCCTA AGTTTGAGTT GATAGTTATT AAAAAGAAAA CAAAACAAAA 120
 AAAAGGCAAG GCACAACAAA AAAATATCCT GGGCAATAAA AAAANTATTT TAAACCAA 179

SEQ ID NO:1876

40

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02129

SEQUENCE DESCRIPTION:

45

GATCCGGGAG CACACCGTTT CCTGATTGCT CAGGGACTCA TCTTCCCTC CTGGGTGATT 60
 CCGCAGTGAG AGAGTGGCTG GGGCATGGAA GGCAAGATTG TGTCCCATTC CCCCAGTGCG 120
 GCCAGCTCCG CGCCAGGATG GCGANGGAAC TCAATAAAGT GCTTTGAAAA TGCTGAAA 178

SEQ ID NO:1877

50

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02130

SEQUENCE DESCRIPTION:

5 GATCATTCTC CGAAAGCAAC TCCTGACAAT TAAGCATTTT TTTCTCCAAA TACAAAGTAT 60
ATTCTCTTTA TTGGAAAATA AATTAATAAA TATATTCTGT ATTTNNCTC TCCGTGAAAA 120
ACAAAAGAGC CTCTGACATT ACTGTCTCTC AGTGTGGTT CAGATTGAGG CTTN 175

SEQ ID NO:1878

10 SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02131

15 SEQUENCE DESCRIPTION:

GATCAATCCT TCTTATGTTT GCTTAAATGT GTATTGAAGA AAAGCACTTT TAAAAAGTA 60
CTCTTTAAGA GTGAAATAAT TAAAAACCAC TGAACATTG CTTTGTTC TAAAGTTGTT 120
CACATATATG TAATTTAGCA GTCCAAAGAA CAAGAAATTG TTTCTTTCA AA 172

20 SEQ ID NO:1879

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS02132

SEQUENCE DESCRIPTION:

30 GATCTGATTG TTTAAAAGTA CACAGCACCT CCCTCCCCAC TCTCTTTGC TCCTGCTTTC 60
ATCAAGTGAA AACTCCCTGA GGCCTCCTCA GAAGCTGAGT AGAGGCCAGC ACTATGCTTC 120
CTGTACAGCC TGTGGAACCA TGAGGCAATT AACCTCTT TCTTTATAAA 170

SEQ ID NO:1880

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS02133

SEQUENCE DESCRIPTION:

40 GATCAGAAAA ATTCATCTTT TTTAACCTG CCCTAATTTT TCTTGAGGAA TTAAATAGAG 60
CAAATATTT TCAGGTATG CTTACAATAA AATATACTTA AGAAAATGAC TGAAGATGTA 120
TGTTTTTGAA TGTGTTGATT AAATAAATGT ACACATTTAG AACACAAA 168

SEQ ID NO:1881

SEQUENCE LENGTH:168

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02134

SEQUENCE DESCRIPTION:

50 GATCAGCCTC CCGTAAGCC AGTTATCAGT ATCCAAGTGC TTTAACACAG GCTTCTCAGA 60
AGAAATCATT TTTATTCCTA CCATTATTC ATACCAAAGC ATCATTATGT GCTACAGTTC 120

55

CAATTTCTTA CACAAGAATG AAAAGGGTTA CCAATGCAGC AAGTTAAA

168

5

SEQ ID NO:1882

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02135

10

SEQUENCE DESCRIPTION:

GATCTTACTG TAAGTTGAAG GGAGTTTTCG CCTAACTCAT GGATTGTGCA AGAATGAACT 60

GCTGTTGGGT TTGACTGACT GTCGATGGAT TGTGGTGTGG TGTATCTNAA GGCTATTGAA 120

TGCAACTTAC AATGCTTAGG TAAAAATCTT TATNCTTTTA GTATAAA 167

15

SEQ ID NO:1883

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS02136

SEQUENCE DESCRIPTION:

GATCCTTGAT GAGCCAACAT TGCACGTGG ATACATATCT ATGTTTACGC GCTATTAGAA 60

CAGAAGGCGC TGTATATAGA AATGTTGCTT TGAAGCAATA TTTGCAAAAC ACNCAGACTN 120

CAGNATCTGT ATTTGGAAAA AATAAAACAG GTTCTTGTG CTAAA 165

25

SEQ ID NO:1884

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02137

SEQUENCE DESCRIPTION:

GATCTGACCT CCACGGAGCC GCTGTCCCCG NCCCCCTTGC TTCCCGTCTG TCTGTCTGT 60

35

CTGATTCTNT TAGGTGTCAT GTTCTTTTT CTGTCTTGTG TTCAACTTTT TTTAAAACTA 120

GATTGCTTTG AAAACATGAC TCAATAAAAG TTTCTGNCC AATTTAAA 168

SEQ ID NO:1885

SEQUENCE LENGTH:163

40

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02138

SEQUENCE DESCRIPTION:

45

GATCAGATG GCTTCACAAG CCAGCTGTTG GGTTCCTAT GTCACGTGG CTCAGTCACA 60

TCCCTGCGTG TATACTGTCT GCGGGGCACA TATGTATCCA TTTAGAGCTA AAGGAATCAG 120

TGTACACTAC AGCTAATCCT AATAAATCCG ATGTTTTCGG AAA 163

SEQ ID NO:1886

50

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear
 CLONE:HUMGS02139
 SEQUENCE DESCRIPTION:
 5 GATCTAGCAG CATGCAAACA CATCACCTAA ACTACAAAAG AAAGGTCCTC ACTGTCTCTA 60
 AAAAATAAAC TCATTAACCT TGAGTTATTT GCAGACAGCC AAATCACCCA GGGCAACTTT 120
 AAAGAGTCAG AAAATAAAAC TTTCCCGTTG TATGACAAA 159

10 SEQ ID NO:1887
 SEQUENCE LENGTH:154
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02140
 15 SEQUENCE DESCRIPTION:
 GATCATGGAG GAAAAAGGTA CTGGATAAAA GTAAACTTCA AACCTTAGGG CGGGANACTA 60
 AAACCAAAAT ACATGTATTA TTTATAGAAA ATATTTTCTG TTTTAATCTT TTCTNITTAA 120
 ACAAGGACTC ATACTTAAAA AAATGTTTAG CAAA 154

20 SEQ ID NO:1888
 SEQUENCE LENGTH:151
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS02141
 SEQUENCE DESCRIPTION:
 GATCTCTGAT GACCTAACCT AAGCAAAACC ACTGAGCTTC TGGGAAGACA ACTAGGATAC 60
 TTTCTACTTT TTCTAGCTAC AATATCTTCA TACAATGACA AGTATGATGA TTTGCTATCA 120
 AAATAAATTG AAATATAATG CAAACCATAA A 151

30 SEQ ID NO:1889
 SEQUENCE LENGTH:150
 SEQUENCE TYPE:nucleic acid
 35 TOPOLOGY:linear
 CLONE:HUMGS02142
 SEQUENCE DESCRIPTION:
 GATCTATATT CTCTTAATT TTTATGGCTA TATTTAATGT TTTCCATCAT TGTGCCTTTA 60
 AAAAGTATAT GTACATGTAT GCATAAATTT ATGTGAAGTT ATATATANGN NTCCGTTATT 120
 40 CCAGATTAAA GTTTATCTTT AGTAATCAAA 150

45 SEQ ID NO:1890
 SEQUENCE LENGTH:149
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02143
 SEQUENCE DESCRIPTION:
 50 GATCAAAAAT ATGTGACCTT AATGAGATTT TTATGATTC TAAAGTAACA ATAAAAGCAG 60
 TTTTATAGAGT TGAGTTCCAG AGAGGGCAGG GCAATGGCAG TNACATGTTT GTCATTTTAA 120

55

TAATAAATAA CATCTATTGA GTNCTTAAA

149

SEQ ID NO:1891

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02144

SEQUENCE DESCRIPTION:

GATCCGCGGG GACCCTGCCG AGGGGGCTGT CATGCGGTTT CCAAGGTGCA CATTNCCAC 60

GGAAACAGAA CTCGATGCAC TGANCTGCTC CGCCAGGANA GTGAGCGTGT AGGTNCCTGA 120

GGAATAAAAT GTTCCGATGA TGTGAAA 148

SEQ ID NO:1892

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02145

SEQUENCE DESCRIPTION:

GATCCCCGTT CTTCAAGCTT CTCTGCTCAG TGTCTACTAA CGACCGACAT TTGCTAATGT 60

AAATAATAGT AAATNATTGA GAATTCTAAT TCTTTTACAC AGTCTGTTTT TAATCTATTT 120

TAATTAAATA AAATCTATGA CTCTAAA 147

SEQ ID NO:1893

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02146

SEQUENCE DESCRIPTION:

GATCTGGGAG TAAACTTAAC ATTCAGTGTG TCTCTGCTCT GCATCCGCCA TTTGTGTGTG 60

TTTCTGGACT GTGGGCTGTG TGTACCTTGG TTGGTGACTC AGTGAGAAGA AGCAGGAATN 120

CCAAAGATAC TGTGAATNTT CTGAAA 146

SEQ ID NO:1894

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02147

SEQUENCE DESCRIPTION:

GATCTAAATG TCTAGTTTTG TATTCTTTTG TGTGTGTTC A CTGTTTCTCA GTATTACCAC 60

TTGAATAATT CTCTGTACAG GGGGGTTTGT GCTATACACT GGGATGTCTA ATTGCAGCAA 120

TAAAGCCTTT CTTTAAAAAG GAAA 144

SEQ ID NO:1895

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear
 CLONE:HUMGS02148
 SEQUENCE DESCRIPTION:
 5 GATCTTGGAA ATGCTTGAAG ACCACAAGGC TGAAGAGTGC TTTGCTGGAG TCCTGTTCTC 60
 AGAGCTCCAC AGAAGACACG TGTTTTTGT TCTTTAAAGA CTTGATGAAT AAACACTTTT 120
 TCTGGTCAAT GTCAAANNA A 141

10 SEQ ID NO:1896
 SEQUENCE LENGTH:142
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02149
 SEQUENCE DESCRIPTION:
 15 GATCCAGATA AACTTTCCTG TCATGTGTTA GAACTTTATT ATTATTAATA TTGTTAAACT 60
 TCTGTGCTGT TCCTGTGAAT CTCCAAATTT TGTACCTTGT TCTAAGCTAA TATATAGCAA 120
 TTAAGAGAG AGAAGAGGA AA 142

20 SEQ ID NO:1897
 SEQUENCE LENGTH:133
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS02150
 SEQUENCE DESCRIPTION:
 GATCAAGTG TGGGATGNGC TGCAAGACGT AGAACCTACC TGCCCTGCCC CCGTCCCCNC 60
 CCTTCCTTAT TTATTCCTGC TGCCCCAGAA CATAGGTCTT GGAATAAAAT GGCTGGTTCT 120
 30 TTTGTTTTCC AAA 133

35 SEQ ID NO:1898
 SEQUENCE LENGTH:130
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02151
 SEQUENCE DESCRIPTION:
 40 GATCTAAGTT GCATCTTTAA TCCTGGTGGT CTTGCCTTCT GATTTTAAAT TTGTATCCCT 60
 TTCTATTAAG ATATATTTGT CATTTTCTCT TGAATATGTA TTAATAATC CCAAGCAATC 120
 CAGTAACAAA 130

45 SEQ ID NO:1899
 SEQUENCE LENGTH:247
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02152
 SEQUENCE DESCRIPTION:
 50 GATCGAGGAG ATGCCCTCTG AACGCCTGTC CCGGAGCACC CGCCAGCGGG CAGCCTGTGC 60
 CCAGCTCAAC GACTTCCTCC AGGAGTATGG CACTCAGGGG TGCCAGGTCTN TNAGGGCTGC 120

55

EP 0 679 716 A1

CCTCCCACNN CCGCTGGGAG GAACCTNAAC CTGGGAACCA TGAAGCTGGA AGCACTGCTG 180
TGTCGGCTTT NATGAACACA GCCTGGGACC AGGGCATATN AAAGGCTTTT GGCAGCAAAG 240
TGTCAAA 247

5

SEQ ID NO:1900
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS02153
SEQUENCE DESCRIPTION:
GATCTTCCTG CTACCTCTT GGATTCTAAG TGGTTCCAAG CTTAACTTGA GACCTTCCCT 60
TCAAATCTAA AATTGGCAAA AAGTCACTTA AAATAGTGGA CTTCTGTAAT AAAGGTTGCC 120
TAAATAACA AA 132

15

SEQ ID NO:1901
SEQUENCE LENGTH:128
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS02154
SEQUENCE DESCRIPTION:
GATCTACAGG TTNCAATTCA ACCTGTTTCT AGGTTTTTTT GTAAATTTAG TTTTGATTAA 60
GCATTATAAG CATTTGAGTC TATAAACTTT ATAGTAGCAT CTTTCAGAAT AAACATTTTT 120
AATTGAAA 128

25

SEQ ID NO:1902
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

30

CLONE:HUMGS02155
SEQUENCE DESCRIPTION:
GATCCATGAG TTGCCCCTGG TTCTACTGGC CCAAGTGGTT TGTGCTAACC ACGTCTGTCT 60
TCACAGCTCT GTGTTGCCAT GTGTGCTGAA CAAAAATAA AAATTATTAT TGATTTTATA 120
TTTCAGGGGA AA 132

35

SEQ ID NO:1903
SEQUENCE LENGTH:128
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS02156
SEQUENCE DESCRIPTION:
GATCCAAGAC AGAATAATGA ATGGACTCAA ACTGCCTTGG CTTCAGGGGA GTCCCCTCAG 60
GNCGTTGAGG ACTTTTCGAC CAATTCAACC CTTTGCCCCA CCTTTATTAA AATCTTAAAC 120
AACGGAAA 128

45

SEQ ID NO:1904

50

55

SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02157

SEQUENCE DESCRIPTION:

GATCCACAGG GGTGGTGTCA AATGCTATTG AAATTGTGTT GAATTGTATG CTTTTTCACT 60
TTTGATAAAT AACATGTAA AAATGTTTCA AAAAAATAAT AAAATAAATA AATATGAAAC 120
CTTAAA 126

SEQ ID NO:1905

SEQUENCE LENGTH:122

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02158

SEQUENCE DESCRIPTION:

GATCTACAGA TGAATATTTA ACTCAATAGA AAAATTATTT TAGAACACAT TGTATTGGTA 60
TTACAACCAG ATTATATTCT TGACGTTGAC TTCATTAAAA TTATCTACAA TTCCTAATA 120
AA 122

SEQ ID NO:1906

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02159

SEQUENCE DESCRIPTION:

GATCTCATGG ATACAAACAG GTGACCTTGC CAATTGGTGC TTTTGTGTG TTTAAGAAAA 60
GAACAGTAGT AACCTTGCTC CCTGGNTACC AATAAAAAAT CTATTATTTT TTTAAAGAA 120
A 121

SEQ ID NO:1907

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02160

SEQUENCE DESCRIPTION:

GATCTGACCC CTGTCAGATG NAAATGATTC ACAGCTCTGG CAGTCCCAA GTCTGGGGAG 60
GGGTATAGGT TTGAAAGGCT GTTGAAAGA GGAATGTTTA ATAAAGGCTT TGATTAAA 119

SEQ ID NO:1908

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02161

SEQUENCE DESCRIPTION:

GATCCCAGCT GGGCCCTATG TTGTGTTCTG NGAAGGAGGC CTTTGCTGTG AACTGCAGTG 60

EP 0 679 716 A1

TTTCATACGA ACCATCTTTC CTAGTGCATG AGAAATAAAG ATTATTTAAG TAATGAGGAA 120
A 121

5 SEQ ID NO:1909
SEQUENCE LENGTH:116
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02162
10 SEQUENCE DESCRIPTION:
GATCTCACTT TTCAGGAAAC TTAAATTTA CCCATTATTG GGAAGCTTAA ATGAATTGAA 60
GCTATGCAAG TCTTTTATAT TATTAAATAT TTTAAAGTAA ACCTGTACTA ATCAAA 116

15 SEQ ID NO:1910
SEQUENCE LENGTH:116
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02163
20 SEQUENCE DESCRIPTION:
GATCGATATG CTCATAAAAG TGCTCAATTA TATTNCTGT ATTTTGTATG NTGTATTTTC 60
CAAGACGTAT ATTATTTTAC TATTAAAGAA AAAATCATT TTTTTTCCC GAGAAA 116

25 SEQ ID NO:1911
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02164
30 SEQUENCE DESCRIPTION:
GATCCGGGCA TGGGAGACCC CACTTTAGAA AGGGTCGTCA CTCCTTTAAT CCTCTACTCA 60
ACAATGTACT CTTTACTTTT TATATTAAAA AAAATAAAAT AAATATGTGC CTAAACCTC 120
CAAA 124

35 SEQ ID NO:1912
SEQUENCE LENGTH:115
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
40 CLONE:HUMGS02165
SEQUENCE DESCRIPTION:
GATCCACTTC TACTTAATGA GTAGTAAATA TATTTCTTTT TCCTTATGAT TTTCTTACTA 60
TTTNCCTTAG CTTGCTTTAT TATAAGANTA TAGCATATAA TATAAATAAA ATAAA 115

45 SEQ ID NO:1913
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
50 CLONE:HUMGS02166

55

SEQUENCE DESCRIPTION:

GATCCAGAAA TTGTGAACAA TGTTTGATTT AGTAGCGTGA CTGCGCTTTC CCTTTAAAAA 60
 CATCTTTTAC AAATCTGTCT TGGAAATAAG TCTATTTTCT GCCTTTTGGA AA 112

5

SEQ ID NO:1914

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS02167

SEQUENCE DESCRIPTION:

GATCCTAATT GCCTAGAAAT ATCTTTCTCT TACCTGTTAT TTATCAATTT TNCCCAGTAT 60
 TTTTATACGG AAAAAATTGT ATTGAAAACA CTTAGTATGC AGTTGANNNN GN 112

15

SEQ ID NO:1915

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS02168

SEQUENCE DESCRIPTION:

GATCAACCGT GAAGCGTAAC AAATTCTGTA TTTAGTTTTT TTTTCTGTG TGGTGGTTTT 60
 TGTTTTGTG TTTGTTTTTG TAAGATTCTA AATAAATNAA ATACGAGTCA AA 112

25

SEQ ID NO:1916

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS02169

SEQUENCE DESCRIPTION:

GATCAAGACT NCAGTTTGGG AATGCATGGA CACCGGATTT GTTCTTATT CCTTCACTTT 60
 TGGGGAAAAT CTCNCCNTNT TAAAAAGTG ATAAATTGG TGTTAGGTCA AA 112

35

SEQ ID NO:1917

SEQUENCE LENGTH:112

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS02170

SEQUENCE DESCRIPTION:

GATCAACGCG ACTGTATTTT GAAACATTCC AGGAAGGTTA CTTCTTGTC AACTTGCCTG 60
 GCAGTGTTTG TTCAAANCTT GTATTTAATA AATGANCATC TGACTTTACA AA 112

45

SEQ ID NO:1918

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS02171

55

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCTATCTT AAGAAGTGAC CAGGAAAGAG GTTCATTGAA ATAATCATGC ATGAAGCGCC 60
 AAAGATGCAC CATGTAGAAT TTTCACTTTG TACTGGCAGG CTCGTTTTAC CTGATTCTAG 120
 AATATTTAAG AATCTAAAAA TAAAGGGCAA CTCTGACTTA AA 162

SEQ ID NO:1919

SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02172

SEQUENCE DESCRIPTION:

GATCAGGGAA CTAAGCATTG TGTGAATTCA CCAGCAAGAT GTACAGNACG CCTGTNTTTA 60
 CATTGTTTT ATGGAAGTAG CAGAATAAAN CATCTATTTT AAAAATGCAA A 111

SEQ ID NO:1920

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02173

SEQUENCE DESCRIPTION:

GATCTGCGAG GAAGCCGCCT ACTCCAACCC CAGCCTACCT NTGGTGCACA NATCCGTCCC 60
 ATAGCAAAGC CCCTGCACAG ACTCCAGCCG AGCCACACACC TGGNTATNAG GTGGGCCAGC 120
 GGAAGCGCCT CATCTCCTCG GTGGAGGACT TCACCGAGTT TNTNTGAGGC CGGGGCCCTC 180
 CCTCTGCAC TGGCCTTGA CCGTATTGCC TGTCAAGTAA ATAAATAAAG TCCTGACCCT 240
 AGTGCACAGA CATAGAGGCA CAGATTGCAG TCAAA 275

SEQ ID NO:1921

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02174

SEQUENCE DESCRIPTION:

GATCAGGACA GAGACTTGGG GGCCATCCTG CCCCTCCAAC CCGGACATGT GTACCTCAGC 60
 TTTTCCCTC ACGTTGCATC AATAAAGCTT CTGTGTTTGG AACAGNTAAA CAAA 114

SEQ ID NO:1922

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02175

SEQUENCE DESCRIPTION:

GATCCCAAGC NTCCCGTCCC TTGGAAGTN CAGCCAGAAT CTNCGTCCTG ACCCCCGACA 60
 GCCCAGCCTA GCCCCTTGT CATCCATAAA GCAAGCTCAA CCTTGAAA 108

SEQ ID NO:1923

EP 0 679 716 A1

SEQUENCE LENGTH:272
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 5 CLONE:HUMGS02176
 SEQUENCE DESCRIPTION:
 GATCCCCCAG GTTCAGACTG AGCTCCCCCT TCCCAGTAGC TCTTGCATCC TCCTCCCAAC 60
 TCTAGCCTGA NTNCTTTNCA ATAAAAATA CAATTCAAGT TGCTTCTCAT GGATGGCACT 120
 10 GCTTTCCTGA GGAACAAGG TGCCAAGATG GAGGGGCTGA CTCAGTCCAG CCAACNTTTA 180
 ATGAGNACCT ANNNGGTGTA TGGAGCTCTA ACCCATGGGT CCATGGGAAT AAAGCAGTGA 240
 ATAGTAACAA TAAATAATTG TAACAGCANA AA 272

SEQ ID NO:1924
 15 SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02177
 SEQUENCE DESCRIPTION:
 20 GATCTGACGT TTTCTACGTA GCTTTTGTAT TTTTTTTTTT TAATTINAAG GAACACTTAT 60
 GAAGCCCTGC CATNCCCCTC CCGNGTCTAA TAAACGTAT AATCACAAA 109

SEQ ID NO:1925
 25 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02178
 SEQUENCE DESCRIPTION:
 30 GATCAACTTG TGCTTGCCAG AGGACGCCAA TGAAGTTTGA AACACCAACA ATCAGAGATT 60
 TTGTTTCTGT TCCTCATTAA ATCATGAGCT TTTGTGCCGA GAAA 104

SEQ ID NO:1926
 35 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02179
 SEQUENCE DESCRIPTION:
 40 GATCGTGTGT GTAGGTGGTG TTGTGTGGTT TTCCTTTGTG AAGGAGAGAG GGAAACTATN 60
 TGTAGCTTGT TTTATAAAAA ATAAAAATG GGTAAATCTT GAAA 104

SEQ ID NO:1927
 45 SEQUENCE LENGTH:103
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02180
 SEQUENCE DESCRIPTION:
 50 GATCCTCCA CTCCACCTC CCAAGTAGCT GTGGCTACAG GTGTGTGCCA CCATGTCCAG 60

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CTGATTTTNG TATTTTNAGT AGGGACAGTA TTTCTCCATG AAA

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SEQ ID NO:1928

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02181

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SEQUENCE DESCRIPTION:

GATCTAAATC TCATTTTATG CTGTATTTTA TATCTNAGTT GTNTTTGAAA ACGTTTGTGAT 60

TTTGTGAAAC ACATCAAAAT AAATAATGGC GTTNTTTGTA TGCAAA 106

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SEQ ID NO:1929

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02182

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SEQUENCE DESCRIPTION:

GATCTGGACG AATGATACCA AACGTTTCTT TCTAACATTG TATTTTATAA CTCTGGCCTA 60

TGATTGTNTT GTGTCTTGCA TTAACAAAAA AAATTTGAGA GTGGTAGAAT TACTTCTGTT 120

ATCTGAAATA CCTGAGATGC ACTTTAACT GTTGAAATGT AAGCNCCTGAG GGCAGGGNCC 180

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GTATCTNATT TACTGTAGT ATCCGTTGCA TCTAGTGTGG TGCACCTGGC ACACAGTAGG 240

CACTCAATAA ATATGTATTG ATTAANCA AA 272

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SEQ ID NO:1930

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02183

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SEQUENCE DESCRIPTION:

GATCTACAGC TCCTGGATAA TTGCTTGATT CTCGCCAGAG ACTGTCAATA TTTNATTCAT 60

TGCCATTACC AATAAATCAT TGCTTTTGT NAGATGGTAT CACTAGTGT TCCATTGTAA 120

TCTTGACACA TGCAATTGTA AATAAAGTC ACCACTTTTG CCAAGCTTAA A 171

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SEQ ID NO:1931

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02184

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SEQUENCE DESCRIPTION:

GATCATACCA CTGCACTCTA GTCTGGGTGA CAGAGCGAGA CCCTGTCTTG AAAAAAATAA 60

ATAAAAAATAA AAAAAATAA AACTGGCACT ACGTTTAAA 99

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SEQ ID NO:1932

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

TOPOLOGY:linear
 CLONE:HUMGS02185
 SEQUENCE DESCRIPTION:
 5 GATCTGTGTC TTAAGACTTA CTGGAATGGA AATCTATGAA TTATTGCAA TTGTAATGCT 60
 GGAAACAAAA AATAATCCT TGGTTAAAGG GTTTGTAAA 99

SEQ ID NO:1933
 SEQUENCE LENGTH:99
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02186
 SEQUENCE DESCRIPTION:
 15 GATCCTGACA CTCTANCACT CGACTCTGCT GCTCATGGGA AGAACAGAAT TNCTCCTGCA 60
 TGCAACTAAT TCAATAAAC TGTCTTGTGA GCTGATAAA 99

SEQ ID NO:1934
 SEQUENCE LENGTH:90
 20 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02187
 SEQUENCE DESCRIPTION:
 25 GATCTTGACT TATATTCTGT ACCACATACA CTTCTGTGGA CTTTTCAGCAT TTGTGGGTAG 60
 ACTTAATAAA GCATGTATAA AAGTGGCAAA 90

SEQ ID NO:1935
 SEQUENCE LENGTH:91
 30 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02188
 SEQUENCE DESCRIPTION:
 35 GATCAGGNTG CGGATAGACT TGTAAGGGTG TTTGCTGCAT ACAGTGTAAAG CATTGTGACC 60
 GCCAATAANC TTCAATGGTT TCTACTGNAA A 91

SEQ ID NO:1936
 SEQUENCE LENGTH:91
 40 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02189
 SEQUENCE DESCRIPTION:
 45 GATCTTTCGT NITTCTAAGC GACTCTACTT TCATTGTTTG CCAGCNTAGC TCGTTGCTGT 60
 TGCCAATAA AGCTNGTGTA CGTNCTGCAA A 91

SEQ ID NO:1937
 SEQUENCE LENGTH:86
 50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS02191

SEQUENCE DESCRIPTION:

5 GATCTTACAT CTGCAGCTCT TTCTTCTTTG AATTCCTAT CTGTATGTCT GCCTAATTAA 60
AAAAATATAT ATTGTATTAT GCTAAA 86

SEQ ID NO:1938

SEQUENCE LENGTH:86

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02192

SEQUENCE DESCRIPTION:

15 GATCATCAGT GTTCCTTTTT ACTTATAAAG TTGGATTCTT TTTAGAATT TGTAATAAAT 60
AAAAACTGCT GCTTTACCAC TGTAAT 86

SEQ ID NO:1939

SEQUENCE LENGTH:91

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02193

SEQUENCE DESCRIPTION:

25 GATCTACCTT GCCTGTACTA CTCTAGGGAG TATGCTGGAG GCAGAGGGCA AGGGAGGGGT 60
GGTATTAAAC AAGTCAATTC TGTGTNGTAA A 91

SEQ ID NO:1940

SEQUENCE LENGTH:84

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02194

SEQUENCE DESCRIPTION:

35 GATCATGAGT GACCCAGCTG TCTCACGTTG TTTATTCTGC GTCCCTTCT CCAATAAAAC 60
AAGCCAGTTG GCGTNGTTA TAAA 84

SEQ ID NO:1941

SEQUENCE LENGTH:79

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02195

SEQUENCE DESCRIPTION:

45 GATCCCCATG CCTAGCAGAG TGCTGGCACT TAGTAGGTCC TCAATAAATA TTTATTAAAT 60
GATGAGATGA TGGAGCAAA 79

SEQ ID NO:1942

SEQUENCE LENGTH:78

50 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear
 CLONE:HUMGS02196
 SEQUENCE DESCRIPTION:
 5 GATCCAATCC CATAGACAGC TCTGGGCCTC TTGCATTGA GTTTTTAGA ATTAACTGC 60
 AGTATTTTGG AAAGCAAA " 78

SEQ ID NO:1943
 10 SEQUENCE LENGTH:77
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02197
 SEQUENCE DESCRIPTION:
 15 GATCCACTAA GGAAATGTTT TAACAGCTAG AGACCACTGC TTGCCTGAAA GGGCGTTCTT 60
 AAATTTGGTG CAGCAAA 77

SEQ ID NO:1944
 20 SEQUENCE LENGTH:76
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02198
 SEQUENCE DESCRIPTION:
 25 GATCCACTTC AAGAATTGCT TGCTTTCAGG AAGAGAGATG TGTTTCAACA AGCCAATAA 60
 AATATATTGC TGCAAA 76

SEQ ID NO:1945
 30 SEQUENCE LENGTH:76
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02199
 SEQUENCE DESCRIPTION:
 35 GATCGACTTT GTGTCTCTGT TGTCTAAAAT AGGTTTTCCC TGTTCTGGAC ATTTCAATA 60
 AATGGAATCA CACAAA 76

SEQ ID NO:1946
 40 SEQUENCE LENGTH:75
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02200
 SEQUENCE DESCRIPTION:
 45 GATCATAGAT TTCTGATTTT ATGTAAAATT TTGCCTAATA CATTAAAGCA GTCACCTTTC 60
 CTGTGCTGTT TCAAA 75

SEQ ID NO:1947
 50 SEQUENCE LENGTH:74
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear
 CLONE:HUMGS02202
 SEQUENCE DESCRIPTION:
 5 GATCTGTCAA AGAAACTTC CAAAAGATT TATTAATTAA ACCAGACTCT GTTGCAATAA 60
 AAATCCTACA GAAA 74

SEQ ID NO:1948
 SEQUENCE LENGTH:73
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02203
 SEQUENCE DESCRIPTION:
 15 GATCCACTTT AGCAAACCTT GCTGCAGAGG ACTGTAAAA CAAATACTA AAAATAAACT 60
 TAGAAAAATAC AAA 73

SEQ ID NO:1949
 SEQUENCE LENGTH:73
 20 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02204
 SEQUENCE DESCRIPTION:
 25 GATCGTAATG TTTATCATGT TACTTCCCCA CCCCTACATT TTTGAAATA AAATAAGGAA 60
 TTTTATTCTC AAA 73

SEQ ID NO:1950
 SEQUENCE LENGTH:72
 30 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02205
 SEQUENCE DESCRIPTION:
 35 GATCNC TGCA ACTAAGNTTA AAGCAGTGTG ACTGTGTTGC TNAAATATCA AGTATTGTTT 60
 ATAACCACCA AA 72

SEQ ID NO:1951
 SEQUENCE LENGTH:66
 40 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02206
 SEQUENCE DESCRIPTION:
 45 GATCTCAGCT ATTAAGATGC AAGTCTGCCA ATGCTCCTGG CCAAATAAAC CTCTTCCTTC 60
 TTAAA 66

SEQ ID NO:1952
 SEQUENCE LENGTH:65
 50 SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

TOPOLOGY:linear
 CLONE:HUMGS02207
 SEQUENCE DESCRIPTION:
 5 GATCCTCTTG TACTGGGAGA GGTGCCTTTT GTATCCCCAA TTAAAGGTAG AAAACCACCC 60
 TGAAA 65

SEQ ID NO:1953
 SEQUENCE LENGTH:62
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02208
 SEQUENCE DESCRIPTION:
 15 GATCTCGAAG AAAAAAGGGG GAGACCAAAG AATAAAGAA GGGTTTCCCC ACTAAATGA 60
 AA 62

SEQ ID NO:1954
 SEQUENCE LENGTH:62
 20 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02209
 SEQUENCE DESCRIPTION:
 25 GATCCAGCTG TNCTTAAGAG CCAGTAATGT CTTAATAAAC ATGTGGCAGC TTNNTTTGA 60
 AA 62

SEQ ID NO:1955
 SEQUENCE LENGTH:61
 30 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02210
 SEQUENCE DESCRIPTION:
 35 GATCTCACAT TTCACCCAG GCTCAACTGA GGATGTGGCT TATTAAACAC GGAAGTGCAA 60
 A 61

SEQ ID NO:1956
 SEQUENCE LENGTH:59
 40 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02211
 SEQUENCE DESCRIPTION:
 45 GATCAGCCAT GINTATCTTT TAAAAAATA AACAGGTTGC TTTATTCTT AGCTTCAA 59

SEQ ID NO:1957
 SEQUENCE LENGTH:59
 50 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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EP 0 679 716 A1

CLONE:HUMGS02212
SEQUENCE DESCRIPTION:
GATCAGATGA GATTTAATGA AGACCCAGTG TAAAGAATAA ATGANTCTTA CTCCTTAAA 59

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SEQ ID NO:1958
SEQUENCE LENGTH:57
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02213
SEQUENCE DESCRIPTION:
GATCTACACC TGGACTGCCC AGGTCTATAA GCCAATAAAG CCCCTGTTTA CTTGAAA 57

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SEQ ID NO:1959
SEQUENCE LENGTH:56
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02214
SEQUENCE DESCRIPTION:
GATCGAAGAA AAAGGGGNGN CAAAGAATAA AAGAAGGGTT TCCCACTAAA ATGAAA 56

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SEQ ID NO:1960
SEQUENCE LENGTH:111
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02215
SEQUENCE DESCRIPTION:
GATCAGAAAT GTTGANTGTG CATTGAGTAT TAAAAAATTA GATGTATATT ATNCATTGTC 60
CTTTACTCAT GAGTACCTTA TAATANTANT ANTGTATTCT TTGTTAACAA A 111

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SEQ ID NO:1961
SEQUENCE LENGTH:167
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02216
SEQUENCE DESCRIPTION:
GATCTATTCC CCATCCCAAG GCAAGCATGA ATAAAATTAG GTTAAACGTA GCATGTGGCA 60
TCGCAGTCTC TTAGAATTG TTTCATCTAT TTNATTTTAT TGAATACTGT CTGTATCTTT 120
GGTTATCCTG TTTGAAGAAA AAGGACAAAT AAAACATGGC CAGCAAA 167

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SEQ ID NO:1962
SEQUENCE LENGTH:516
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02237
SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

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GATCCTCATT CTCACCCATT TGGCTAATCC AGGAATATTG TTATCCCTNA NCCATTATAT 60
TNAAGTTGAG AAATGTGACA GAGGCATTTA GAGTATGGAC TTTCCTTTCC TTTTNCITTT 120
NCTTTTTTCC TTTTGTAGAT GGAGTCACAC TCTCCAGGCT GGAGTNCAGT GGCACAATCT 180
CGGCTCACTG CAATTNCCGT CTCCCAAGTT CAAGCGATTC TCCTGCTTTA GACTATGGAT 240
TTCTTTAAGG AATACTGGTT TGCAGTTTTG TTTTCTGGAC TATATCAGCA GATGGTAGAC 300
AGTGTATTATG TAGATGTGTT GTTGTTTTTA TCATTGGGAT TTAACTTGG NCCGAGTNAA 360
ATAATCAGGT TTTTGTCACT CACACTCTCC CCCAGTTTTT GGGAAATACT TTGGAAGGTA 420
AGGTTTCANTN CCCTAAGGCC GGTGGGGTTN CTGTTGGACC TATGGGGGGN CCACAACGTN 480
ACTATTTAAT TCCNCCCCAC TGTAAGGGGC AAAGGN 516

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SEQ ID NO:1963
SEQUENCE LENGTH:483
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02238
SEQUENCE DESCRIPTION:
GATCTTTCCA GATGACTTGT CCAAGGTCAC ACAGGAGTCA GATGGCCTTT CCACTACCCC 60
ACAACACAGA TGCATAGTTA CTCTGTGGGC TAATACAATT CAGAATTCAG AGCTCTGCCC 120
ATGGTCACCG GTGGAATCCA CCAGCCATCT CCTGACCTT GCTCTCCTCT GTTCTCCTCG 180
TCTCCAGGGT CCCATGATTC AGGCGGAGCT GGCTTCAGGA TGTGGGCAAG AGGGGTTTTA 240
GATGGAAGGG TTTTCTCCA GGACAGAATG TTAAGCCAAG CCTGGACTTA ATTGTTCCAA 300
GATGTCTGTTA GAATTGGTGG ACAATTTTTT TTTAATGATT AGCAAAGGAC AAGGCTTTTG 360
GTGGTCATTA GTATTGTCA TCAAATATTC CAGTTCTCCA CAATTCTGGG GTACCATGGT 420
ANGGATGAAC CTTCCTGTC TTTTCAGGGT TAAGTTTAGC TCTNGTGATG TGCTTTTGTG 480
AAA 483

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SEQ ID NO:1964
SEQUENCE LENGTH:452
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02239
SEQUENCE DESCRIPTION:
GATCGCTGGA GCTGTGGTCG CTGCTGTGAT GTGGAGGAGG AAGAGCTCAG ATAGAAAAGG 60
AGGGAGCTAC TCTCAGGCTG CAAGCAGTGA CAGTGCCAG GGCTCTGATA TGTCTCTCAC 120
AGCTTGTAAG GTGTGAGACA GCTGCCTTGT GTGGGACTGA GAGGCAAGAT TTGTTCTCTG 180
CCTTCCCTTT GTGACTTGAA GAACCCTGAC TTTGTTTCTG CAAAGGCACC TGCATGTGTC 240
TGTGTTCTTG TAGGCATAAT GTGAGGAGGT GGGGNGACCA CCCCACCCNN ATGTCCACCA 300
TGACCCCTCT CCCACGNTGA CCTGTGCTCC CTCCCAATC ATCTNTCTG TTCCAGAGAG 360
GTGGGGCTGA GGTGTCTCCA TCTCTGCTC AACTTCATGG TGCAGTGGC TGTAACNTT 420
TCCTGNNTAT TAAAATAAGA CCTGAGTTTA AA 452

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SEQ ID NO:1965
SEQUENCE LENGTH:433
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

CLONE:HUMGS02240

SEQUENCE DESCRIPTION:

5 GATCAGACAC CAGAGGGTTG GGCATTCTTG CAATACCTTA ACAGTGCTGA AATCTGCAGC 60
 ATGGTACTAA GGAAGTTAAA GTTTGAATGT AACCACCTTA TTTAAAAGGT TTTTCTCTT 120
 AATTTAAATG AAATGGTGGT TGAAGTGAAC ATGATTTTGT TGACCATGTT CGTGAATTAC 180
 AGATGCAACA TGCATTGGTA GAATCGTGTG ATGGTCTTTT GTGATACTTA ATTTTACAT 240
 ATCCCAGTCT CTGTATGTAT CTGCATAGAC AAAGAAAAA CAAACTCCTG CTTTGCTTTT 300
 ATTGAANGGG TTTCCAGGAC TCGTGTCTG CTCCTGAGCT CTGTTTTAAG TATGTGTATC 360
 10 CTTTGCTTGT ATTTTGAAT TAAAAAATA AGGAAAAGGA NGCCTTTATT TGTTGGNGCA 420
 TGTTGGCATT GTN 433

SEQ ID NO:1966

15 SEQUENCE LENGTH:424

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02241

SEQUENCE DESCRIPTION:

20 GATCTGCAAA GAAAGCTTTT CTTNCGTCGC TGCCTCAGNC TCCTCCCTAT GCCTCTNGCA 60
 CCTGCGCAGA AGTGCTGGCT GTGCTGANGT CACCATCATC TTCCTCTCCC CCAGCCTCCC 120
 AGGCTGGATG GCATGGACTG TTTGCTGACC TCTGTTCTCT TAGGGCATGG GAGGTGGGAG 180
 GATATCAAAAT TCTNTAGCCC TTTCTCCTA TTCTCCCAAG NAGAGAGNTT CCCATTTCTC 240
 25 CTCGGCCATT GTACCTAGCT CTTGTCCCTA GCTGCATTTC AGTGGACCAT GGATAGAGGG 300
 ACTGAGNGTT AGACGGGGAA GACTGGCAGN GAGGCACGCA GGTACTGTGA AAATCCTNNC 360
 CTTTGACCTC CNCCAGTGGG AGAGGGGNGT TGGGGTTTTT AATGTGAGAA CAGNAACAAA 420
 TAAN 424

30 SEQ ID NO:1967

SEQUENCE LENGTH:418

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS02242

SEQUENCE DESCRIPTION:

40 GATCNCCTGC TCTCCAAGCA TGGCATCTAT GTGCAGGCCA TCAACTACCC AACTGTCCCC 60
 CGGGGTGAAG AGCTCCTGCG CTTGGCACCC TCCCCCACC ACAGCCCTCA GATGATGGAA 120
 GATTTTGTGG AGANGNTGCT GCTGGCTTGG ACTGCGGTGG GGCTGCCCTT CCAGGATGTG 180
 TCTGTGGCTG CCTGCAATTT CTGTGCGCGT CCTGTACACT TTGAGCTCAT GAGTGAGTNG 240
 GAACGTTTCT ACTTCGGGAA CATGGGGCCC CAGTATGTCA CCACCTATGC CTGAGAAGCC 300
 AGNTGCCTAG GATTACACCC CCACCTGCGN TTAAGTTGGG TCCAGGCCTA CTCCTGTCTT 360
 CTGCTTTGTT GTGTGCCTCT AGCTGAATTG AGCCTAAAAA TAAAGNACAA ACCACAAA 418

45 SEQ ID NO:1968

SEQUENCE LENGTH:413

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS02243

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SEQUENCE DESCRIPTION:

5 GATCATTGAA TAAAACGGGT GTAGAGTACA GGAATGGGGC AGACGCGATT CAGGTGAACA 60
 GCACANGNAG AATATGAGGT GGTTCCTAGG AGCAACACTT TCGACCTCCA GTTCTCCNTG 120
 ATGACAGTAG CTGTCTCCNN GNGAAAAATC CTCACTTATT AACTCTCTTT TCTTGCATCT 180
 CATTTTATA GAGCTACTCA TCCTTATTTG GAAAAACCA CAACAAAAA GGCTTTTAGA 240
 AAATGGTGT AAATCTGACT TCTTTGCAAG TAACTATGTA TATTGTAAAT AGGATATAAA 300
 AAGGCCTTTT TTCTAAATAA GGCCTTAACT GCCTGTAACA TGAAACTTCA AACTAAACCA 360
 10 CTTAACTCAN TGNACTACCT TATGGGTTG TCTGACATCC CTCAACTTAC CAN 413

SEQ ID NO:1969

SEQUENCE LENGTH:412

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS02244

SEQUENCE DESCRIPTION:

20 GATCCCACCG AGAAGAACCA TGGGTGGACC CGAACTCCCC GGTGCTCTNA GAGGACCCAN 60
 NNCTTTGTGC CTTGGCAAAA AAGCACAAGC GAACCCAGC CCTGATTGCC CTGCGCTACC 120
 AGCTACAGCG TGGGGTTGTG GTCCTGGCCA AGAGCTACAA TNAGCAGCGC ATCAGACAGA 180
 ACGTGCAGGT GTTGAATTC CAGTTGACTT CAGAGGAGAT GAAAGCCATA GATGGCCTAA 240
 ACAGAAATGT GCGATATTTG ACCCTTGNTA TTTTGCTGG NCCCCCTAAT TATCCATTTT 300
 CTGATGAATA TTAACATGGA GGGCATTGCA TNGGGGTCTA CCAGAAAGNC NTNGGGTNTT 360
 25 GGANTGGTNG CANAAGNGGG TNGGTTCTTA TGGCTGGGGG NACTTGGGCA AN 412

SEQ ID NO:1970

SEQUENCE LENGTH:406

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS02245

SEQUENCE DESCRIPTION:

35 GATCCAAAGT TCATACATTT TATGTACAAG ATACATTAGA CTTACAATAN AGTCTAATTA 60
 TTAGACTTTT ATGTCAGTGG ATTGTGCTTG CAGAAATACA GAAGTAACAT ACTGACCCTA 120
 GGTGAGGAGT TTCTTACATG GTTAACTGGA TTGACCCAAT TGGAGTAAAA GATTTTGTCT 180
 GTTACCTCGA TGCTCCTGCA GTTGTTACCT CAGCATGCCA CTGTAGTCCT TGA CTCTCAC 240
 ATTA AAACTA ACTTTGGCTA GGTACTGGTG GCTCACACCT GTANGTAATC CCAGTACTTT 300
 AGGAGGCTGA GACTGGAGGA TTA CTTGAGT CCAGGAGTTG GAGACCAGCC TGGCCAATAT 360
 40 AGACTGTCCC TACAAAGGAA AATAAANTTT GTTTCATCTT TCNAAA 406

SEQ ID NO:1971

SEQUENCE LENGTH:401

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS02246

SEQUENCE DESCRIPTION:

50 GATCAAAATAT GGCATCAACA ATATCCGGGA GCTGGTGGGC CACAAGGTGA ACCTGCAGAT 60
 GGTGTATGAC AGTCCCCTGT NCCGCCTGGA TGCCGAGCCG AGGCCCCCTC CCACACAGGA 120

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EP 0 679 716 A1

5 GGCTGCGTGA CATGGGCCAC TCTAGGACAG GTCATCCTCC CCGAGTCCCT GCTGCTGCGC 180
 TCCTTTGCAT CCCTGGCCAG TNACCTTGTA TTTATGAGGC CTCTGTNAGG CAGCCCCCAC 240
 CTTCTCTTT CCCACCTGTC CCAGGACCAG AATCCCAGGG ACAGAGGACT GGGTAGCAGG 300
 TTCCTTCTGT TGTCTGTGT GGTGTGTCTA CTGTGAGGGT GGGCCCTGAG GAGACCTGTG 360
 GGCCANCTAT TGTCTAATAA AGTGGGGCAG TTGCCCCCAA A 401

10 SEQ ID NO:1972
 SEQUENCE LENGTH:384
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02247
 SEQUENCE DESCRIPTION:
 15 GATCTTTNAT GTTGTNNATT TTGGAGAGAA GCACAAGGAG TATTCTCTTT CTAGGGAAAG 60
 TTGTGAACCC AACGGAAGCG TAGTTGGGAA AAAGGCCATT GGCTAATTNC ACGTGTGTAT 120
 TGCAATGGGA AATAAATAAA TAATATAGCC TGGTGTGATT GATGTGAGCT TGGNCTTGCA 180
 TTCCCTTATG ATGGGATGAA GATTGACCCC TGGCTGACCT TTNTTGGCTG TGGGAAGAGGN 240
 CAATCCTATG GCAGAGCATT CAGAATGTCA ATGCGTAATT CATTATTATC CAAAGCATAG 300
 20 GAAGGCTCTA TGTNTGTATA TNNCCCTNTG TCGGAATACC CCCTTANCTC ATTTCCNCT 360
 TAATAAATTT CACTGGGTTG NAAA 384

25 SEQ ID NO:1973
 SEQUENCE LENGTH:383
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02248
 SEQUENCE DESCRIPTION:
 30 GATCTGCTT CTCCCTGGG GTCTTCTGG TTCCCTGAAG CCCCTCTTCC GGAGTCCCTG 60
 CCTCTATCG GCTCTGCCTC CTGCTTCTTT TCTGTATTGC CATGATTTT GCTAAGGATA 120
 AAGGACAAC TCAATGGCTT CTTGGGAAA CTGCAATCT CCCCAAACAG GCCCTCTGA 180
 GATTCTCCT TTTGCCACCT TCGATATTT CTCCAGTTTC CTTGATTCTT TTGATACGTC 240
 35 CCCATTGAG CCACTCTGGC CTTCCATCCA ACCTGCCAGA ACTTTTCCA CTTGAGCACT 300
 TCAGTCACTT AAACATTAGG GCTCCCTGCC CTAAAGGGAC TCAAAATCCT GCAAAANCAA 360
 CCACNNAAGG ATAAAAAAT AAA 383

40 SEQ ID NO:1974
 SEQUENCE LENGTH:375
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02249
 SEQUENCE DESCRIPTION:
 45 GATCAACAGG AAGAACATGG TGGTCTCCTT TGGAGATGGG GTTACCTTCG TGGTCGTCCT 60
 ACACCAGGTG TGGGAAGAAC ATCCTGTCCA CCGTGACTTT CTAGGCTTCT ACGTGGTGGA 120
 CAGTCACCGG ATGTCAGCAC AGACGCATGG GCTGNTGGGG CAATTCTTCC AACCCTTTGA 180
 CTTTAAAGTG TCTGACATCN GGCCAGGCTC TNACCCACA AAGCCAGATG CCACATTGGT 240
 50 GGTGAAGAAC CATCANGNTG ATTNNAACCA GGGGCTCCCN GAAAGANTAC AGNAAAGGNA 300

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TGCCANGCAT CGGCACGAAN GGTGTCTTC TTGGTTCGNN CACANCAACG GGAATGTTG 360
TTGNTTGANT GGTGN 375

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SEQ ID NO:1975
SEQUENCE LENGTH:370
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02250

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SEQUENCE DESCRIPTION:

GATCTATGTG CACACACCCN CATCACATGG AATGGGCTGG TCTAGGCTGT GGCCTGNCAC 60
CTTCCTTAGA GTGAATAGGG CGGACACTCC TCTCTTTTCC TGTAGCGTGT GGACCGGTCC 120
ACGCAATTCT TTATCCTGTG AACTCATCTG AGTGGGAGGT GGTGGACACT GGGGTTTCCT 180
TCCCTCTCTC CGTAGCATCC GTTGGTCTTT CTCTCCATCT CTGTTGGTTT GTCTGTCTCT 240
GTCTTCCTCC CAATCCCTAG GGAAGGGGG CATTGGGTA GGGGGTGCCC CTGTGAGCCT 300
NGACCTTGCC CCCTCGTCCN TCTCCCCAGT GTTCCAGGA CCCCCAATAA ACCTTGTCTT 360
GTCAGTCAAA 370

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SEQ ID NO:1976
SEQUENCE LENGTH:367
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02252

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SEQUENCE DESCRIPTION:

GATCGATACA GGGGAGGGGG GAGGTGAAAA CAAACAACAA AACTGTACAT TTTTTTAAA 60
GTTTGTGAA AAGAATATTG TCTATTCTA TAAACATTT CAAACCTAGT TAGAGATTG 120
TAATCAAAAA ACATTGCGC AGAAAGCAGC ACTTAGGGCT GCCTGTTCTA TACCCTACAG 180
TCAGACAGGA AAAGANCTGA AAATGGCACC CTTCTGACAT TCTGNGGCAG CTGGNCTNGC 240
AGCCANGTAA NGGNGAGTTT ATGAGGTGGT GTGGGGAGGG TGGGGAGGC NGCGTGGGGG 300
NTTCTCTCCA CAGCAGGTGG GNGCAGGCAA GNNTTTGGNG GCCAGANGN GNGCTTTGTN 360
CNTGGGN 367

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SEQ ID NO:1977
SEQUENCE LENGTH:353
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02254

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SEQUENCE DESCRIPTION:

GATCTCCAGC CTTACCGCGG CTCGAAATGG ACCCCAAC TGCTCTGCACC ACTGGTGTCT 60
CCTGCGCCTG CACCGGCTCC TGCAAGTGCA AAGAGTGCAA ATGCACCTCC TGCAAGAAGA 120
GCTGCTGCTC CTGCTGCCCC GTGGGCTGTG CCAAGTGTGC CCACGGCTGT GTCTGCAAAG 180
GGACGTTGGA GAACTGCAGC TGCTGTGCCT GATGTGGGAA CAGCTCTTCT CCCAGATGTT 240
AATAGAACAA GCTGCACAAC CTGGATTTTT TTTCAATAC GATACTGAGC CATTGNNGC 300
ATTTCTTTTT ATGTTAAATA TGTGAGTGAC AATAAAACAA TTTTGACTTG AAA 353

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SEQ ID NO:1978

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SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02255

SEQUENCE DESCRIPTION:

GATCTNACCT GAGGTGCTGG GTGAGAAATC TTAGGGACCA GATGGAAGAG GGCCTGTNTA 60
 TANNGACATT AGGAAGGAGG TTTGGGAAGG TTTGGGAGGG CAGCCTGACT TGTCTCCAGA 120
 GAAAGTTAGA ACTGGTTGAC TTAGCAACCA AGGGNCACTG GGTCAAAGAC GAGGANTCAG 180
 GACGTCGGTG CCTAGTGACT GAGCGCCANC CAGCCCATT CTNTACATTG CCATGGGCTA 240
 AACCCAGTGT GCTGTAACT CTTGCAGTTC CTTGNGGTTA TGGGATTTTG NTATCTTGNC 300
 NGTGTTCCT CAANTAAAGG NNCTTGTTG TAAAAATTGG GNAANAAGAA A 351

SEQ ID NO:1979

SEQUENCE LENGTH:342

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02256

SEQUENCE DESCRIPTION:

GATCTGTTTC CTACAGACTT CAAATTTGAC ACCCCAGTGG ACAAACCTACC ACAGCTATAA 60
 ATTGAGGCAG CTAACGTCAA ATTCTTGAAT ACAAACCTTT GCCTGTTGTA CATAGCCTAT 120
 ACAAATGCT GGGTTGAGCC TTTCATGAGG AAAAACAAAA GACATGGTAC GCATTCCAGG 180
 GCTGAATACT ATTGCTTGGC ATNNNGTATG TATATACTAG TGAAACATAT TTAATGATTT 240
 AAATTTCTTA TCAAATTTCT TTTGTAGCAA TCTAGGAAAC TGTATTTTGG AAGATATTTG 300
 AAATTATGTA ATTCTTGAAT AAAACATTTT TCAAAACTCA AA 342

SEQ ID NO:1980

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02257

SEQUENCE DESCRIPTION:

GATCAGCATG ACCAGCACTC GTTGGNGGAA AGGTGTCTNT NAGGAGACGT CTGGAGCTTA 60
 TGAGAAAACA GATACTGATG GGAAGTTTCT CTATCACAAA TCCAAATGGA ACATAACCAT 120
 GCGCTCCTAT GTGGTCCACA CCAACTATGA TGAGTATGCC ATTTTCCTGA CCAAGAAATT 180
 CAGCCGCCAT CATNGACCCA CCATTACTGC GGTGTCCCTG GTGATGGNGA TGAGGAGCTN 240
 CTGCGCTTCT CCAACTGACA ACTGGCCGNT CTGCANGTCA GAGGATGGNC AGTGTCTGTC 300
 CNGGGGTACT GTGGCAGNCA GCGACAAGCA ACCTGNGTCN 340

SEQ ID NO:1981

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02258

SEQUENCE DESCRIPTION:

GATCNTNCG NCTCTGAAGA AGACATGGTG ACTGTGGTGG AGGACTGGAT GANNTTCTAC 60

EP 0 679 716 A1

ATCAACTATT ACAGGCAGCA GGTGACAGGG GAGCCCCAAG AGCGAGACAA GGCTCTGCAG 120
 GAGCTTCGGC AAGAGCTGAA CACTCTGGCC AACCCITTCC TGGCCAAGTA CAGGGACTTC 180
 CTGAAGTCTC ATGAGCTCCC GAGTCACCCA CCGCCCTCCT CCTAGCTCAG GGACCCAGCC 240
 5 CCTCCTCTCT GAGAACTCT GACCTTCATG TCCTTAGGCT GTGCTCCTGC CACTCTACCC 300
 TGACACCTCA ATAAAGACCA GTGCTGGTTT TGTGGAAA 339

SEQ ID NO:1982
 SEQUENCE LENGTH:334
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02259
 SEQUENCE DESCRIPTION:
 15 GATCCTTNCG TGCTGAATAT CTGAAAAGAG AAATTTTTC TACAAAATCT CTTGGGTCAA 60
 GAAAGTTCTA GAATTNNAAT TGATAACAT GGTGGGTTGG CTNAGGGNAA GAGTATATGA 120
 GGAACTTTT AAACGACAAC AATACTGCTA GCTTTCAGGA TGATTTTAA AAAATAGATT 180
 CAAATGTGTT ATCCTCTCTC TGAACGCTT CCTATAACTC GAGTTTATAG GGAAGAAAA 240
 20 AGCTATTGTT TACAATTATA TCACCATTA GCAACTGCT ACACCCTGCT TTGTATTCTG 300
 GGCTAAGATN CATTAAAAAC TAGCTGCNCT TAAA 334

SEQ ID NO:1983
 SEQUENCE LENGTH:332
 25 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02260
 SEQUENCE DESCRIPTION:
 30 GATCTTGTGC CAAGCTNAGG GTGTAGCGCT GCAAACGATG AAGCAAGAGT TTCTCATTAA 60
 CTTTGTGAAG CAAAAGCCAC AAATAACANA GGAACAACTT GAGGCTGTCA TTGCANATTT 120
 CTCAGGCTNT TGGAGAAATG CTGCCAAGGC AGGACAGGAG TCTGCTTTGT GAGAGGGCAA 180
 AAAGTATTT CAAAACTCG CCTGCTTTGG GNTTTAAATT ACTTCAGGGN AGANAGCAA 240
 CAGNCTTTT ATTCGGTGTN ACTTTTCTCT NNAATTTTAA CTNNTTTAAC ACTTTTGTG 300
 35 GATTAATGNA ATGATAAAGC CTTTATCGC NN 332

SEQ ID NO:1984
 SEQUENCE LENGTH:331
 40 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02261
 SEQUENCE DESCRIPTION:
 45 GATCCTGTGT GTGTGTACTA CCATAGAATG GGGCCCAAGA TGCATGATNA AGTGAGGAAA 60
 AAAGCCCATG GTATCCTAAT GTTTGGAATG GAGAAAGTGT GTAGATGTAT GTGTGTGCAT 120
 ATGTTTTTAC ACAGACGTAT ACACGTGTAT ATCATATGTC CACCTGCATA TGCCTAGGAT 180
 GTCTCTGGGA GGATATCTAG CAGCCCGGCA GCCTGAATTG CCTCTGGGAA GAGGGGTGGG 240
 AATGACTTTT CAATGTACAC CTTTGTACC TTTTGAATTT TCGTACCATG TACATGTATT 300
 50 ATCTATTAAA AAATAGTTCT TAATTTTAA A 331

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SEQ ID NO:1985

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02262

SEQUENCE DESCRIPTION:

GATCACCCGG CAAGTTCAGG CTGAATTCTG AAGGCAAAC T GAGCAGACG GTCTCCATGG 60
 CAACCCGAGC TTCAGAGGCC GAGGATGCCT CCCTTCTCAG CTTTCATGCAG GGCTACATGA 120
 AGCAGGCCAC CAAGACCGCC AAGGATGCAC TGAGCAGCGT GCAGGAGTCC CAGGTGCCCC 180
 AGCAGGCCAG GGGCTGGGTG ACCGATGGCT TCAGTTCCTT GAAAGACTAC TGGAGCACCG 240
 TTAAGGACAA GTTCTCTGAG TTCTGGGATT TGGACCTGA GGTTCAGACCA ACTTCAGCCG 300
 TGGCTGCCTG AGGACCTCAA TACCCN 326

SEQ ID NO:1986

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02263

SEQUENCE DESCRIPTION:

GATCCTTACA TCTGCATCTA GTTATCAGTA ATTTAGATAT TGAGCTATTT TGATTATAT 60
 TTAAGAAATT AATACATTAG CACTGAAAGT TAAATAGTGT GTTTAAGGTA GTTAATTTCA 120
 GGTGGAATGG GTTTTTTTTA ATGAAGTGTA AATAATACCA ATGTATAAGN GTATATTATN 180
 ATATTAAATA TTATAGTAAA AAGGAATGTG TGGTATTTNC TNCAGCAAAA CTATTTTTGT 240
 GATNTTTTNA TTCTCANCTT TNTATTTAAA AAATGTTACA TCTGCAGAAA AGTTGAAAGT 300
 ATAATAAACT CTTCAGTTAA A 321

SEQ ID NO:1987

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02264

SEQUENCE DESCRIPTION:

GATCTGCGCT GTGGCTGTCC CTGGACGTGC TGCAGCCCTC CTGTCCCTTC CCCCCAGTCA 60
 GTATTACCCT GTGAAGCCCC TTCCCTCCTT TATTATTCAG GAGGGCTGGG GGGGCTCCCT 120
 GGTCTNAGC ATCATCCTTT CCCCTCCCCT CTCTTCCTCC CCTCTGCACT TTGTTTACTT 180
 GTTTTGACA GACGTGGGCC TGGGCTTCT CAGCAGCCGC CTTCTAGTTG GGGGCTAGTC 240
 GCCGAATTCT ACAATCCCGC TGGGGCGGCC GGGGCGGGAG AGAAAGGTGG TGCTGCAGTG 300
 GTGGCCCTGG GGGGCCATTC N 321

SEQ ID NO:1988

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02266

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCAAAAAT TTCTATCTGG AGAACCTCTG CGGACAAACC GAGTGCTTCC TGCAATTCCA 60
 AGTCAACGAA GACACAGCAC AGCAGCAGAA GAGAGTGAAC ATTCTGCCAA CCCCACCACT 120
 GATGAAAATT AACTGTGGGC CACTCGCTGC AGAAATGTAG ATGAATATGT ATTTTCAACT 180
 CTCAAAGGAC AAGATTACTC CAGTTTGTA GAACGAAGAC CAATTTAGTA AGCTGCATTC 240
 TATAAGCCAT CAGTTTTATA ACTCGAAATT CTTTATTCCA AATAAAGATA CTCCTAAAT 300
 AAGCACTTAG ANAAA 315

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SEQ ID NO:1989
 SEQUENCE LENGTH:312
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS02268

SEQUENCE DESCRIPTION:

20 GATCAAAGCT GGGGCTGGAG GGTGGAGGTG TCAAGCCAGG CCAGGCAAAG GGAGATTTGA 60
 AGCCAGAGCA GGTGGGCGCA TCTCCCAGGA AACCTGCAAT CATTCTTTCC TGGTGATTCT 120
 TTCCTTCTTT GTTATGGTTC ACATGAGTCT ATGGAGTGCT CATTCTACAT TCTCCGTTCT 180
 TATCTTCATC CTATGCAACT TTAGACCGCT ACTGTTTTTT AAAAGTGATT TGATTTGNGG 240
 CTGTAACTT TTTTATTGT TGTTAGCTTT GACTTTGAAA TGTGTAATAA AGATTCAAGT 300
 GAGCATTAGA AA 312

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EP 0 679 716 A1

SEQ ID NO:1990

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02269

SEQUENCE DESCRIPTION:

GATCTTGGGG TCCCCGACG ACGTGCTCGA GTTCCTGAAG GTGTATGAGA AGCACTCNGC 60
CCAGTGAGCA CCTGCCCTGC CTGCATCTGG AGAATTGCCT CTACCTGGAC CTTTGTCTC 120
ACACAGCAGT ACCCTGACCT GCTGTGCACC TTACATTCTT AGAGAGCAGA AATAAAAAGC 180
ATGACTATTT CCACCATCAA ATGCTGTAGA ATGCTTGGCA CTCCTAACC AAATGCTGTC 240
TCCATAATGC CACTGGTGT T AAGATATATT TTGAGTGGAT GGAGGAGAAA TAACTTATT 300
CCTCCTTAAA 310

SEQ ID NO:1991

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02270

SEQUENCE DESCRIPTION:

GATCCGAGTG AATGCAGTAA ACCCCACAGT GGTGATGACG TCCATGGGCC AGGCCACCTG 60
GAGTGACCCC CACAAGGCCA AGACTATGCT GAACCGAATC CCACTTGGCA AGTTTGCTGA 120
GGTAGAGCAC GTGGTGAACG CCATCCTCTT TCTGCTGAGT GACCGAAGTG GCATGACCAC 180
GGGTTCCTACT TTGCCGNTGG AAGGGGGCTT CTGGGCCTGC TGAGCTCCCT CCACACACCT 240
NAAGCCCCAT GGGCGTGCTC ATCCTACCCC CAATCCNTCC AATAAACCTG ATTCTGCTGG 300
CCAAA 305

SEQ ID NO:1992

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02271

SEQUENCE DESCRIPTION:

GATCGAGACA CGTGATGGGA AGCTGGTGTC TGAGTCCTCT GACGTCCTGC CCAAGTGAAC 60
AGCTGCGGCA GCCCTCCAG CCTACCCCTC CTGCGCTGCC CCAGNNNCTG GGAAGGAGGC 120
CGCTATGCAG GGTAGCACTG GGAACAGGAG ACCCACCTGA GGCTCAGCCC TAGCCCTCAG 180
CCCACCTGGG GAGTTTACTA CCTGGGGACC CCCCTTGCCC ATGCNTCCAG CTACAAAACA 240
ATTCAATTGC TTTTTTTTTT TGGTCCAAAN TAAACNTCA GTTAGCTNTG CCAATTTNAA 300
A 301

SEQ ID NO:1993

SEQUENCE LENGTH:311

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02272

SEQUENCE DESCRIPTION:

GATCTGAACT CCAGCTGCCC TACAACTCC GTCACAGCTT TTNTTCTCAC TTCATGTGAA 60
 AACTACCCCA GTGGCTGACT GAATTGCTGA CCCTTCAAGC TCTGTCCTTA TCCATTACCT 120
 TAAAGCAGTC ATTCCTTAGT AAAGTTTCCA ACAAATAGAA ATTAATGAAT AAATGTTGAC 180
 ACTTTGATAG CACTGATATG GAGATTATCC TTTCATTGAG CCTTTTATCC TCTGGTCTTC 240
 TTTGAAGAAC CCCTCACTGT CACCTTCCTG AGAATACTCT AAGACCAATA AATACTTCAG 300
 TATTTCAGAA A 311

SEQ ID NO:1994

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02274

SEQUENCE DESCRIPTION:

GATCTAAAAC TNAAGAACAA ATTCTATTTA TTTATTATTG GAAAAATNAAA AGCAACTCAA 60
 AACAACTTCA ACCTGGAGGT GCATTTATAA TTCATTCTGC ATTTATTCTG TAAAAAGGTG 120
 ACTGTTTTAT AAATNCTTTT AATTTATGTT CAATATATAT AAAAAAGTGCA TCTNTTTTNT 180
 TTTTCCTTT TTTCTCCATA ATTTAAGAA ATGAATNNGN TTGTTGTCAA CACATTTGTG 240
 AAGTCTGTG CTATAAAGGG GAACCTCCCC TAATAAAGG GCCTTGGAAG CCTCAAA 297

SEQ ID NO:1995

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02275

SEQUENCE DESCRIPTION:

GATCTAGGAG AGGCGGCTCT GAACGATTAC CTGCGGGTCA AGACAGTNAC CTTGGAATAC 60
 TGAAGAAAGG TCTTTTAAAG AAGAAAGTCC CTGCCCCCTC CTCGTGGCTG GGGCCCCCTC 120
 CCTNTTAAGC CTGGNTGCAC AGCACCTCCC ACCTGGGGGG CTAGTGGAAG CCCTCCTGCN 180
 TGCACACCAT GTTGCNTCT TGGACGCCCT CTTCCAGTN ANAAGCAGCC CTTGGNTGGN 240
 TNAGGTGTGC CCCTCCAGG NAGAATAAAG CTTCTAAAGA NAGACCGTCC AAA 293

SEQ ID NO:1996

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02276

SEQUENCE DESCRIPTION:

GATCAGGAGG AAGTGAGCAG TCGCCTGCCT GCAGCAGGNA GCTTTCTACT CCTGCCTCAT 60
 GCGTACGTCC CACAAATGCA GGTGTCTGA GCACCACACC CAGTGGGAAG AGTGTGGGGG 120
 AGGCGCACAG TGTGAGCCCG CCCCCACGTC GTGGGTTAAC ATCTGTTATC AAAGTGTGT 180
 CGTTGTTGTG GGTGTTGTCC TTGAACAAGA TGTGGGCCTT GCAAGATGGG AGAGTAAACC 240
 TTGAAGGGCT TTATTAAGA AATAAAAAAG NACTTNTTGT ATCTTTTAAA 290

SEQ ID NO:1997

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02277

SEQUENCE DESCRIPTION:

GATCCTGAAG AGGATGGTGT GGGAAATGCAC TTTGAGAAAT GNCTATCTAA CCTTTNGAAA 60
 CTTAAAGTGT TCCCAGTCCC CATTATACTT TTTAAAACCA CAATAGTCAC ATAAGGAAAT 120
 AATCTAGCAG CTCATCCCTT TGCATCCAAT GTTTGAACTA TTTTAGAAA GTGCTCTNGT 180
 TCTGTCAAAG AACCTTCAAC ACAGAAAAAT ACANAAATGA GGGAAATGTA TAATTCCTGC 240
 AGGAGAGAAG TGTGTTAAC ATGTCAATAN ATGTTCTTAG ANAGTTAAA 289

SEQ ID NO:1998

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02278

SEQUENCE DESCRIPTION:

GATCAGAGAA GCTAGGAGAG CTCCAGCAGG GGCACAGAGG ATTGGNNGCA GGAGGAGTCT 60
 GGAACACAGC CTTATGCCC CCTGACCCCA GGCCGACCCT CCCCACACCC TAGGGTACCC 120
 CAGTCGTATC CTCTGTCCGC ATGTGTGGCC AGGTCTGACA AACACCTGTA GATGACTGNT 180
 GGCCNAACCT GGGNCCTGN CAGGAGGTTG GAGCAGNAAG GGCTCTCCCT AGGGGTGGTG 240
 TMTCTCCTCT AGGGTATTGG GNTGCATGTN NTGCACTNN 279

SEQ ID NO:1999

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02279

SEQUENCE DESCRIPTION:

GATCATGAAG GAACACATAG CACCAAGAGA GGCCATGCTA AATCTCGCCC TGTCAGAGGT 60
 ATCCACACTT CTCCTTTGGG GAAGNCTTCC CTGTCCCCCT TGCATTTCCCT TCTTAACTCT 120
 CTGTTACACG TCATTGAAAC TACACTTTTT TGGTCTNTTT TTNTGCTAGA CTGTAAGTTC 180
 CTTGGGGNCA GGGCCTTTGN CTGNCTCATC TCTGTATTCC CAAATGCCTA ACAGTACAGA 240
 GCCATGACTC AATAAATACA TGNTAAATGG NAAA 274

SEQ ID NO:2000

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02280

SEQUENCE DESCRIPTION:

GATCTTAACA AAATTCGTAG CAGTGGAAAC TTGAAATGCA TGTGGCTAGA TTTATGCTAA 60
 AATGATTCTC AGTTAGCATT TTAGTAACAC TTCAAAGGTT TTTTTTGTG TGTTTTCTAG 120
 ACTTAATAAA AGCTTAGGAT TAATTAGAAG AAGCAATCTA GTTAAATTTC CCATTTGTAT 180
 TTNATTTNCT TGAATACTTT TTNCATAGTT ATTTGTTTAA AANGATTTAA AAATCATTGC 240

ACTTTGGTCA GAAAAATAAT AAATATATCT NATAAACAAA

280

SEQ ID NO:2001

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02281

SEQUENCE DESCRIPTION:

GATCTGCATG TTCTCTCTTT GGGTTCAAGC ATTTCCTTAC AGAAGAGCCA CCGTGGAAGT 60
 CATGGGTAAA TATGTGTTGA ATTGGTAACT CCCTCTTGA GAATTTCTTG TGAATTACAC 120
 AGCAATAGGG GAACTCATTT AACTGGAGAC ATAATCTCAA TTTGTAAAGT GTGGCCCAT 180
 TTCTAACATT TTNANNTTGC ATACCCTCCC CTCTCTTCTC GATTGATGAA ACTAACAAAG 240
 AGGTAAATAA AAGCCCATCT CGTCATGTAA A 271

SEQ ID NO:2002

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02282

SEQUENCE DESCRIPTION:

GATCTTACCC GTGACAAAAT GTGTTCCATG GTCAAAAAAT GGCAGACAAT GATTGAAGCT 60
 CACGTTGATG TCAAGACTAC CGATGGTTAC TTGCTTCGTC TGTCTGTGT TGGTTTTACT 120
 AAAAAACGCA NCAATCAGAT ACGGAAGACC TCTTATGCTC AGCACCCNCA AGGTNCGNCN 180
 AATNCGGGAG AAGATGATGG GNAATCATTG GCCCCGTGAG GGTCAAGGC AAANTTTGCT 240
 TTTGAANGNA AGGGGGGNNNA ATAAATTNGN 270

SEQ ID NO:2003

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02283

SEQUENCE DESCRIPTION:

GATCCCAACA GAAGAACATC GGAGACCAGA GAGAGGAACT CAAAGGGGCG CTGCCTCCGG 60
 GTCTGGGGTC CTGGCCTGCG TGGCTNTTG GCACGTGTTT CTCTCCCCG CCCGGCCTCC 120
 AGTTGTGTGC TCTCACACAG GCTTCCTTCT CGACCGGCAG GGGCTGGCTG GCTTGAGGC 180
 CACGAGNGTN GGCTCTACCC NAACTGGCT TTGCTGTGTA TACGCTTNTT GCCCTTAAAT 240
 AAATATGCAC ATTTTATCCA TTAAA 265

SEQ ID NO:2004

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02285

SEQUENCE DESCRIPTION:

GATCCACATT GTTAGGTGCT GACCTAGACA GAGATGAACT GAGGTCCTTG TTTGTTTTG 60

EP 0 679 716 A1

5
TTCATAATAC AAAGGTGCTA ATTAATAGTA TTTCAGATAC TTGAAGAATG TTGATGGTGC 120
TAGAAGAATT TGAGAAGAAA TACTCCTGTA TTGAGTTGTA TCGTGTGGTG TATTTTTTAA 180
AAAAATTGAT TTAGCATTCA TATTTTCCAT CTTATTCCCA ATTAAAAAGTA TGCAGATTAT 240
TTGCCCAAA 249

10
SEQ ID NO:2005
SEQUENCE LENGTH:242
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02287
SEQUENCE DESCRIPTION:
15
GATCAGGAGC AACAGACCC TGCAAGGTCC TCCAGGCCCTG GGGACAGGAA AGCCACTGAC 60
CCAGCCCGGG AGGCAGAACCC AGGCAGCCTC CNTGGCCCCA GGCAGCCCTT TTCCCTCCAG 120
TGGCACCCTCC TGGAAACAGT CCACTTGGGC GCAAAACCCA GTGCCTTCCA AATGAGCTGC 180
AGTCCCCAGG CCATGAGCCT CCCGGGAATG TTTAATAAAG GGCCTGGCCA CCTCTCCTCA 240
AA 242

20
SEQ ID NO:2006
SEQUENCE LENGTH:239
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
25
CLONE:HUMGS02288
SEQUENCE DESCRIPTION:
GATCTAAGTT TGATAAGAGC CTGTGTGGTG AGTATGGTGT GTATGTGAAG GTGACTTCCA 60
TCCAGGACTG GGTTCAGAAG CCATAGCTGA GACTAATGCA AGGCTGGCGA AGCCTTGCTG 120
30
AAAGAAGATT TCAGCTGGAG AGGCAAAGTG GCGGGAGTGG CAGAGTGGTG CGTAAGTGTG 180
GTTAAGTNTG GGTCCANCCT GCATTCTGAG CAATCAATAA AGTNTTTCTT TTNCCCCAA 239

35
SEQ ID NO:2007
SEQUENCE LENGTH:238
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02289
SEQUENCE DESCRIPTION:
40
GATCCTGAAG GTAATACAAT CAGCAACATT AAAACATTTT TTTCATTTTC TGTTACTGAA 60
GTAAAATAAG CATTCCACAT TTATAAACAA CAGGTTATTT CAGGAAGATA TTTTCATATC 120
TTACAGCGAA AAGTCTTTTC AAACAGAAGC ACCTAATATT TAATATATTA TTTTGTAAT 180
TATTGACTAA CAAAATGATG ACTCGACTGG CGAAATAAAA TACAGTTTTT AAATCAAA 238

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SEQ ID NO:2008
SEQUENCE LENGTH:236
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
50
CLONE:HUMGS02290
SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

5 GATCCTGAGA NCTTCAAGCT CCTGGNNAAT GTNCTGGTGA CCGTTTTGGC AATCCATTTC 60
GGCAAAGAAT TCACCCCTGA GGTGCAGGCT TCCTGGCAGA AGATGGTGAC TGGAGTGGCC 120
AGTNCCCTGT CCTCCAGATA CCACTGAGCT CACTGCCCAT NATGCAGAGC TTTCAAGGAT 180
AGGCTTTATT CTGCAAGCAA TCAAATAATA AATNTATTCT GCTANGNNA AACAAA 236

10 SEQ ID NO:2009
SEQUENCE LENGTH:235
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02291
SEQUENCE DESCRIPTION:
15 GATCATTACC ATTACAGGAA CACAGGACCA GATACAGAAT GCACAGTATT TGCTGCAGAA 60
CAGTGTGAAG CAGTATGCAG ATGTTGAAGG ATTCTAATGC AAGATATTTT TCCTTTTTTA 120
TAGTGTGAAG CAGTATTCTG GAAAGTTTTT CTAAGACTAG TGAAGAACTG AAGGAGTCCT 180
GCATCTTTTN NNGTTTAANC TGCTTCTGTT NAAAANGCCA NCATTCTCT GTTN 235

20 SEQ ID NO:2010
SEQUENCE LENGTH:233
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02292
25 SEQUENCE DESCRIPTION:
GATCCTGAAG AACTTCAAGC TCCTGGGAAA TATGCTGGTG ACCGTTTTGG CAANNNGTTT 60
CGGCAAAGAN TTCACCCCTG AGGTGCAGGC TTCCTGGCAG AAGATGGTGA CTGGAGTGGC 120
CAGTGGCCCTG TCCTCCANAT ACCACTGAGC TCACTGCCCA TAATGCAGAG CTTTCAAGGA 180
TAGGCTTTAT NCTGCAAGCA ATACAAATAA TAANTCTNTC CTCCTAAGAG AAA 233

30 SEQ ID NO:2011
SEQUENCE LENGTH:229
SEQUENCE TYPE:nucleic acid
35 TOPOLOGY:linear
CLONE:HUMGS02293
SEQUENCE DESCRIPTION:
GATCCTTGAC GAGGAGAGAG AGCTTGAAAA GCTGTTTCAG CTGGGCCCCG CTTACCTGT 60
GAAGATGCCC TCTCCACCAT GGGAAATCAA TCTGTTGCAG TCTCCTTCAA GCATTCTGTC 120
40 GACCCTGGAT GTTGAATTGC CACCTGTTTG CTGTGACATA GATATTTAAA TTTCTTAGTG 180
CTTCAGAGTT TGTGTGTATT TGTATTAATA AAGCATTCTT TAACAGAAA 229

45 SEQ ID NO:2012
SEQUENCE LENGTH:223
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02294
50 SEQUENCE DESCRIPTION:
GATCTGGCAT AAATAAATTN AATAAATATT TTAATGCTCC ATTTTTTAAT GTTGCTTTTC 60

55

ATACTAAAGA ATGGTGTAGA CTTGTTTTGC AACTNTAAGG TACCCAGTTA TCAATTTAAT 120
 CAATGTTTTA GAGNAGGAAA TNATTTTTTN GGTAGAAATT GTTCANGAAC CTTAATTGAA 180
 TGCATTAAAT GATGGTGGCA AAATAAACCT ATTAGAAATT AAA 223

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SEQ ID NO:2013

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02295

SEQUENCE DESCRIPTION:

15

GATCAATGCC CTCATCTGCA ATGTAGGGGC CGGTGGACCT GCTCCAGCAG CTGGTGCTGC 60
 ACCANAGGAG GTCCTGCCCC CTCCACTNCT GCTGCTCCAG CTGAGGAGAA GAAAGTGGAA 120
 GCAAAGAAAG AAGAATCCGA GGAGTCTGAT GATGACATGG GCTTTGGTCT TTTGACTAA 180
 ACCTCTTTTA TAACATGTTT AATAAAAAGC TGAACTTAA A 221

SEQ ID NO:2014

SEQUENCE LENGTH:219

20

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02296

SEQUENCE DESCRIPTION:

25

GATCTGTAGT GTCATGGGTG CTGCCGCAGA CGNAAGTTGA NCTGGGGGTG CCTGCAGCCT 60
 TCCACTCCTG CCCC GCCTCA CCCCACATGC TCCCTGTTTC TAATGCTTTC TCTAACTTCC 120
 TCACCCCTTA ACCAAAAAGG TGTGTTNCT TTTGTNCATA TAGCCATTCT NAAATATNAG 180
 TAATGTAAAC CTNACTTTAT TAAAAAATTA TCCAGCAAA 219

30

SEQ ID NO:2015

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35

CLONE:HUMGS02297

SEQUENCE DESCRIPTION:

40

GATCAGGTTT GTTGAGTTTT TTAGCCTAAT TCCAAAGCAT GGAAGAGTGC TCTAGGTAGG 60
 AAAGAAAGCT TTTTCTTACG ATTTGTAGCT ACCTACTGTG CCTGACTTGG TGCCTGTGTG 120
 AGGATTAAGC CCTTAGTCTG CTCTTGCAAT TATTCAAATG ACAAATTAAT TTTGCTTTTG 180
 TAATAACAAT AAAAGTTGTC ATCTTCCCTT TTGAAA 216

SEQ ID NO:2016

SEQUENCE LENGTH:210

45

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02298

SEQUENCE DESCRIPTION:

50

GATCCTGCCA TCACTGCTGC AAAGAGAACA CGAGACTCAA GGAAACTCCT CCTCCACCGC 60
 AGCCCAACTG TGCCTGCTAG TNTCCCCGTG CACACAGGCA GCTCCAGGGG GCTCTGGTTG 120

55

CCAACAAACA GCATTTGTAA ATGGTCTATT AGCCTTCATT TATACTGCCT AACAATTATT 180
TGAAGGAATA AATTGATGTC AATGGCTAAA 210

5 SEQ ID NO:2017
SEQUENCE LENGTH:219
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02299

10 SEQUENCE DESCRIPTION:
GATCTAGCCT GATTCTGCG TGTCCGAAAG AACCTAACGT TTAAAGGTN ATTGTNAAGT 60
AACTGTGTGG GGTTCCTAATG CCAGTTTCCT AATTCCATCT CACTGGAGAT GTTTAAAGTT 120
GGCCTCTATC CTAATGACTC AAAACTTGGT TCTTAACTAC CATGATTGCT TTNAGGGCC 180
15 CGGAATTATA AATATATATN ATATTTAANT TGTTTGAAA 219

SEQ ID NO:2018
SEQUENCE LENGTH:208
SEQUENCE TYPE:nucleic acid
20 TOPOLOGY:linear
CLONE:HUMGS02300

SEQUENCE DESCRIPTION:
GATCCGGGGC ACAAGAGGGG TGGGGAACAT GGGGGCTATA CTGGGGAAG CAGCCATGCT 60
25 CCCCCNACC TCCAGCCGAG CATCCTTCAT NAGCCTGCAG AACTGCTTTC CTATGTTTAC 120
CCAGGGGACC TCCTTTCANA TGAAGTGGGA AGAGATGAAA TGTTTTTCCA TATTTAAATA 180
AATAAGAAACA TTAAGGCA ACCCCAAA 208

30 SEQ ID NO:2019
SEQUENCE LENGTH:202
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02301

35 SEQUENCE DESCRIPTION:
GATCTCAAGG CTGCCGTACT GGAGGCCATG ACTGCCTTCC GCAGAGCAGG TGCTGACATC 60
ATCATCACCN ACTACACACC GCAGCTGCTG CAGTGGCTGA AGGAGGAATG ATGGAGACAG 120
TGCCAGGCCC AAGAACTAGA ACTTTAAAC GTTCCCGGGG CCTCAGACAA GTGAAAACCA 180
40 AAGTAAATGC TGCTTTTAGA AA 202

SEQ ID NO:2020
SEQUENCE LENGTH:224
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS02302

SEQUENCE DESCRIPTION:
GATCTTCTTT GAGACAAGGC AGGCTGTGGC CATGTAGCCC CATCACAATG TGTGTGTNAT 60
50 TGCTGTGTGT TCTGTCTCCC CCACCAGACT GTGAGCTCCA TGAGGGCAGG GACCGTGTCT 120
TGCCGTTCT CTGTATCCCC AGTGCTTGGG ACAGAGCGAG TGCTCACTGT GTATTTAATA 180

55

AATGGACAAA GAGAGAGGAT GACCCTCAG GGGAGACAGA GAAA

224

SEQ ID NO:2021

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02303

SEQUENCE DESCRIPTION:

GATCGGCAAA TGCATTGGCC TCCTGGTTAA GCACGTTTGG GGGATAATTT TCTCTTCTTT 60
 AGGCAATGAT TAAGTTAGGC AATTTCAGT ATGTTAAGTA ACACACTTAT TTTTGCCTGT 120
 GTATGGAGAG ATTCAAGAAA TAATTTTAAA ACCGCATACA TAATAAAGA CATTGTTGCA 180
 TGGCTTATAG TCAAA 195

SEQ ID NO:2022

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02304

SEQUENCE DESCRIPTION:

GATCTGTGCC GTGGTCCTGA GGCAGTTGTC TCCACACAAG TACCTCTAGA ACAATCCCCT 60
 TTTTCCATC AAGCTGTAGC CTGCAGAGAA TGGAAACGTG GGAAAGGAAT GGTATGTGGG 120
 GGAAATGCAT CCCCTCAGAG GACTGAGGCA TAGTCTCTCA TCTGCTATTG AATAAGACC 180
 TTCTATCTTG AAA 193

SEQ ID NO:2023

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02305

SEQUENCE DESCRIPTION:

GATCTNCCCT GCATCCTGAC CAAGACCCCA ACCGTGCCCC CAACAGACTC CCCCTGGGAG 60
 ATTCAGCCTA TTCCTGATG AGGAAAGTGA AGCCGGGTCT CCTGTCTCCC CAAATTCATT 120
 GCACCTACGA TATAGTCCAG GATTGGGTAG CAAGATTAAA CACAAGCGCT TCAAATTGAT 180
 GAAAACCACA AA 192

SEQ ID NO:2024

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02306

SEQUENCE DESCRIPTION:

GATCCCTAAC TACCAACCCC CTGAAGGCAG GTACAATGAC ATCACCAAGG TGTACACACA 60
 AGTGGAGTTT AAGAGATAGA CTTGCAGGCT GCTATCCTTA ACATGCTGCC CCTGAGAGTA 120
 GGAATGACCA GGGTTCAAGT CTGCTTTCCA CAGAATCAGG CATNCTGTGA ATAAATACTG 180
 GTTTAATCAA A 191

SEQ ID NO:2025

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02307

SEQUENCE DESCRIPTION:

GATCGTATTT CAGTTTTTTG GGTCAATATA TGAACAATGT GTGAACCAGA ACGTATGGTA 60
TTTGACATCA AAGCTATGTC TTGGCATATG TTTATGTTGA TATACTTGAA TTCATTTAAA 120
ATGGAATGTT AATTACATCG ACTTCTTACT ATAAAAATA AAAAGTTATT GTCCAGTGCA 180
CAGAAA 186

SEQ ID NO:2026

SEQUENCE LENGTH:380

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02308

SEQUENCE DESCRIPTION:

GATCCATTGA GAAAGAGATG ATGTAATAAA TAATTAAGAT TAGTAATAAT ATTATCAGGG 60
GTGATTATGA CCAGTTGAAT AATCTCTTTC CCTTGAATTA TTTAGCTAAC AAATTAAGTC 120
TCCCAAATAT NTAAANTAAT GTAAANTCAT ATTNACTGC CCATTATTAA CTAAAAATATT 180
TNTGTTNGAC TTTGAGCACC AACTGGTAAT ACTAGTAAAT ACCCATGTCA TGCAGATGGC 240
TGGGCGAATA AGAGATGTCT AAAAATATGC ACTGGTCTTG GGAACATGG CACAAGTAAG 300
GNTATCATAT ATGANGTCTG GTTTATTTTA TGTCTGATTT CTTTTTGANT GAGTAGTTNG 360
GGACTCCANT TCTAAGGNTN 380

SEQ ID NO:2027

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02309

SEQUENCE DESCRIPTION:

GATCTCTCCA CAGGGCTTGT TTTCCAAAGA AAAGTATTGT TTGGAGGAGC AAAGTTAAAA 60
GCCTACCTAA GCATATCGTA AAGCTGTTCA AAAATAACTC AGACCCAGTC TTGTGGATGG 120
AAATGTAGTG CTCGAGTCAC ATTCTGCTTA AAGTTGTAAC AAATACAGAT GAGTTAAAAAG 180
AAA 183

SEQ ID NO:2028

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02310

SEQUENCE DESCRIPTION:

GATCTGCAGC TGCCTTGGGA CTTGAATCCA TGCAATGTTT AGAGTGTGAA GTCAGTTACT 60
TGTTGATGTT TTCTTACTGT ATCAATGAAA TACATATTGT NATGTCAGTN CTTGCCAGGA 120

ACTTCTCAAC AAAATGGAAT TTNNTTTTNC AGTATTTCAA TAAATATTGA TATGCCCAGC 180
CTGNTAAA 188

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SEQ ID NO:2029
SEQUENCE LENGTH:178
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02311
SEQUENCE DESCRIPTION:
GATCCATGCT GATTTTATT GCACAAGAAT TAGGTTTGAA CTCTGAGCT GGAACCTCAG 60
CAAACCTAGAG TATATATTGT TCAGTATNNC TTTGGAAACA TTTCATTAAT GTACTTGTCT 120
TACANAAATT TCTGAACTTT AGTAAAAAAA AAATAAAGTT AAACTTTAA AACTCAAA 178

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SEQ ID NO:2030
SEQUENCE LENGTH:176
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS02312
SEQUENCE DESCRIPTION:
GATCGGTATG TTTGAAAAG AGTAATTTAA CTTTGGGTG CCAGGAAATG GGTTTTCTCA 60
AAGTCCATTG CCGCAATGG GCAGGCCTGC AAATACTGGC ACAGAGCATT AATCATACAC 120
CTTATTAACG GTGAGGTGAA TAACTTTGAA ATAAAGTTT AGAGAAATGT TTCAAA 176

25

SEQ ID NO:2031
SEQUENCE LENGTH:174
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02313

30

SEQUENCE DESCRIPTION:
GATCCGCCTG GCAGCCATTG CAGAGTCAGG GGTAGAGCGG CAAGTACTTT TGGGAGACCA 60
GATACCCAAA TTCGCCGTTG CCACTTTACC ACCCGCCTGA ATCCTGGGAT TCTAGTATGC 120
AATAAGAGAT GCCCTGTACT GATGCAAAAT TTAATAAAGT TTGTCACAGA GAAA 174

35

SEQ ID NO:2032
SEQUENCE LENGTH:172
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02314

40

SEQUENCE DESCRIPTION:
GATCCAGAAG TTATGGTGGC TTTCCAGGAT GTGGCTCAGA ACCCAGCAAA TATGTCAAAA 60
TACCAGAGCA ACCCAAAGGT TATGAATCTC ATCAGTAAAT TNTCAGCCAA ATTTGGAGGT 120
CAAGCGTAAT GTCCTTCTGA TAAATAAAGC CCTTNCTGAA GGAAAAGCAA CN 172

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SEQ ID NO:2033
SEQUENCE LENGTH:170

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02315

SEQUENCE DESCRIPTION:

GATCTCAGGA CCTCTTTACA CTTTCAAAG TTACTTAAGA CTCTGAAGAG CTTTCTTTA 60
TGAGGTATA TCAATATTTA CTACATTAAG AATTAAACA GAAAATTTAA AGTAGGTATT 120
TATTGATTTA TTAAACAAT AAAAATAATA AAGTATTACA TGCTAACAAA 170

SEQ ID NO:2034

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02316

SEQUENCE DESCRIPTION:

GATCCGTTTG CTGTGAACCC TATGTTATTT CCATGTGTCA AGTGGGTCTT GTGTTGCCAG 60
CTTCTATTTG AAGATTGCGT TTGCACTCAG TGTAAGTTTC TGTCAGCAGT AGTTTCACCC 120
ATTTGCATGG AAAAAATTTAA AGCTAATAAA GCAATTTAAA AAGCACAAA 169

SEQ ID NO:2035

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02317

SEQUENCE DESCRIPTION:

GATCCACAG TCTCAGCCCT GCTTACTAGT GAGAAAGACT GGCAAGGTTT CCTAGAGCTC 60
TACTTACAGA ACAGCCCTGA GNCCTGTAAC TATGGGCTCT GAAGGGGGCA GGAGTCAGCA 120
ATAAAGCTAT GTCTGATATT TTCCTTCACT AATATGAAA 159

SEQ ID NO:2036

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02318

SEQUENCE DESCRIPTION:

GATCCGGGGN AGCTAGGATG GGGAACTGC CACAGCCAGA ACTGAGGGGC TGGCCCCAGG 60
CAGCTCCAG GGGGTAGAAC GGCCTGTGC TTAAGACACT CCTGCTGCCC CGTCTTGAGG 120
GTGGCGATTA AAGTTGCTTC ACATCNTCAA A 151

SEQ ID NO:2037

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02319

SEQUENCE DESCRIPTION:

GATCTAACAT CAAACTAACA GCTTTCAGAA AGGAGACTNT TGNCATCTTT TCACCAAGGA 60

GTATATTTGT AGAGTAATAT ATGTGTGGAA NTTNAAATT ATATCATTG ACATGATTTA 120
TGAGGCTTAT TTAAGCTGGA GTNNCCN 148

5
SEQ ID NO:2038

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10
CLONE:HUMGS02321

SEQUENCE DESCRIPTION:

GATCTGGTCT AGTTAACCTA GAAGTATTTT TGTCTCTTAG AAATACTGT GATTTTTATA 60

ATACAAAAGG GTCTTGACTC TAAATGCAGT TTTAAGAATT GTTTTGAAT TTAAATAAAG 120

15
TTACTTGAAT TTCAAACATC AAA 143

1
SEQ ID NO:2039

SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

20
TOPOLOGY:linear

CLONE:HUMGS02322

SEQUENCE DESCRIPTION:

GATCTGGAGG AGGTGAAGGC CAAGGGACCT GCTTCTATTA GCCCTTCTCC ATGGCCCTGC 60

25
CATGCTCTCC AAACCACTTT TTGCAGCTTT CTCTAGTCA AGTTCACCAG ACTCTATAAA 120

TAAAACCTGA CAGACCATGA AA 142

SEQ ID NO:2040

SEQUENCE LENGTH:156

30
SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02323

SEQUENCE DESCRIPTION:

35
GATCGAAAGA AGAACATCAT GAAAAANAAA TNAACCTTGC TTAGTGGATT AGACTCCTTT 60

GCTGAAGTCA GTTATTCATC AAGAATGCAA TTAGACTAAT TGTGAATAAA TGATTGAATG 120

AAGATATAAT AAATAAAAGC TATAATTATA GATAAA 156

40
SEQ ID NO:2041

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02324

45
SEQUENCE DESCRIPTION:

GATCTCTCCT TCAGTCTGCT CTGTTTAATT CTGCTGTCTG CTCTTCTCTA ATGCTGCGTC 60

CCTAATTGTA CACAGTTTAG TGATATCTAG GAGTATAAAG TTGTCGCCCA TCAATAAAAA 120

TCACAAAAGTT GGTTTAAA 138

50
SEQ ID NO:2042

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02325

5

SEQUENCE DESCRIPTION:

GATCCACAGG CAGAGCCAAG GGAAGGTGTG ATTCTNTGAG GAAAGAGTGA TTCTGATATA 60

TGTACTTGTG ACATTGGTGT TGGACACATT TGCGCCAAAA GTATGGTAAT NCTATTATNA 120

AATAATTCTC TGAGAAA 137

10

SEQ ID NO:2043

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS02326

SEQUENCE DESCRIPTION:

GATCCAAACT GGAANCAGCT CAAATNTCCA TCAATAGCAG AAAGATAAAC AAATGTNGGG 60

ATGTNCAGAG CTTGAAATAT GACACANTAT AAAAGGACAA ACTATTAAAA CTCACAACAG 120

CATGGATAAN TCTN 134

20

SEQ ID NO:2044

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS02327

SEQUENCE DESCRIPTION:

GATCCAAGCA GGCCTTGAAT GCAATNGCAA GTGGTTTATA GTCCCTTGCT CTTACAACCT 60

GCAGGGACAT GTGGTTATTT AGAAATTGTG ACTGAGCGGA CCCAAGAATN TAAATAATAT 120

TCATAAACCT AAA 133

30

SEQ ID NO:2045

SEQUENCE LENGTH:132

35

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02328

SEQUENCE DESCRIPTION:

GATCACCTGT AGGGAAATGA AGTGTNCCCT GGAACAAGGA GGTGGGGGCA NTGTGGCCCC 60

TTCCCCAACT GGGGGTGGAC AGCTGTNTCC TGGGGTGGGT TGGTATTAAA GAGGAAAGCN 120

ATTTTTTGA AA 132

40

SEQ ID NO:2046

SEQUENCE LENGTH:130

45

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02329

SEQUENCE DESCRIPTION:

GATCCCAGGA ACTGTGGGCA CCCATTTTCT GTGTCTCCCA GCCCATTTCC ACTCCTAGTT 60

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55

EP 0 679 716 A1

TGTCATGGAT AATNTTTGTT GTTCCCTGTG TGATTTTTC CATCAAAATA AAAATTGAG 120
ACTCGTTAAA 130

5

SEQ ID NO:2047
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02330

10

SEQUENCE DESCRIPTION:
GATCCAAGGT CAAAAAACA AATNCATCAA TTCAGCACAC CACCAACTNA NAGGCTAAG 60
ATCTTACTGC TAATTCATTG ANGCTGCCAT TTGTCAAGTG CCAAATTGAN TTATTGATTT 120
GTCAATANTN 130

15

SEQ ID NO:2048
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02331

20

SEQUENCE DESCRIPTION:
GATCAGATAT AAAAAATAA AGTTTTTNAT TTCATTAAAT ATTTAATTAA AACTGCTAAG 60
TTTGAATAAT TTTACCAAGA AATANTTTN ANAAATTTN CTAAGTTGAT AAAGGCTTTT 120
AAGCAATAAA 130

25

SEQ ID NO:2049
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02332

30

SEQUENCE DESCRIPTION:
GATCTATATT CCCTTATTGC ATTTTCCTTA TGTATAATTT TCCAGATGGT GATGTTACTT 60
TTCAAGTGTAC TCATATGTCT CATTTTCATC TAAAATTAAA TGGCAGGAAA CAAGGACTGC 120
ATAGAGAAA 129

35

SEQ ID NO:2050
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02333

40

SEQUENCE DESCRIPTION:
GATCAAAAGC TTATTCNTTT TTTTTTTTTT TTCTTTGGTG TAAAGCCAAC ACCCTGTTTA 60
AAANANATAA TTTTTTTTAA TCATTTTGCN TCTTTTTTTT TTGCTTCATT NAATAAAAAAN 120
TGGAAGAN 129

45

SEQ ID NO:2051
SEQUENCE LENGTH:148

50

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02334
 SEQUENCE DESCRIPTION:
 GATCTGAACA CCACAGCCCC TGTACTTGGG TTGCCTCTTG TCCCTGAACT TCGTTGTACC 60
 AGTGCATGGA GAGAAAATTT TGTCTCTTG TCTTAGAGTT GTGTGTAAAT CAAGGAAGCC 120
 ATCATTAAAT TGTTTTATTT CTCTCAAA 148

SEQ ID NO:2052
 SEQUENCE LENGTH:132
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02336
 SEQUENCE DESCRIPTION:
 GATCCANCTN TntCAACCTC CCAAGTAGGA TTACAAGCAT ACGCCGACGA TGCCCAGAAT 60
 CCAGAACTTT GTCTATNACT CTCCCAACA ACCTAGATGT GAAAACAGAA TAACTTCAC 120
 CCAGAAAACA AA 132

SEQ ID NO:2053
 SEQUENCE LENGTH:126
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02337
 SEQUENCE DESCRIPTION:
 GATCCATCCT TCCTGCCTCC AAGGAGGATA CACAGAGAAT GGCTTCCTGT TGTTTGTGT 60
 ATTTTCTTAA CGTGACAGA TGGAACCTTC ATTTAAAAAT AAAACAAAA CAACTCAAAA 120
 AGGAAA 126

SEQ ID NO:2054
 SEQUENCE LENGTH:126
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02338
 SEQUENCE DESCRIPTION:
 GATCAAAAAA GCTCACGTCG TATTTCTTCT TTTCTTTCT CTTTCTAGA AATTGGGTGT 60
 TTGTACCAGA ATGGAATTTT GCTTCTCGGT TATCCTGTGC TTCAGATGAT TATAATCTAA 120
 CCCAAA 126

SEQ ID NO:2055
 SEQUENCE LENGTH:125
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02339
 SEQUENCE DESCRIPTION:
 GATCAAATCT TACAGTTCAT CACAGAATCC ATGTTGGTGA TAAATNCTAT AAAAGTAATA 60

GGGGTGGTAA GAACATCAGA GANTCCACAC AGGAAAAAAA ATCTATAAAA NGATTCTTTG 120
TGAAA 125

5 SEQ ID NO:2056
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02340
10 SEQUENCE DESCRIPTION:
GATCCCACAG AAATGTTTTG GAGAGCGGGA GGTTTCCCCC AATCTCCTCC AAGTTCTTCT 60
CCCTCCAACC AGAGTTGTGT CTAACCTTAG GCATCTTTTA ATAAATNTNA TTGCGACTCT 120
GAAA 124

15 SEQ ID NO:2057
SEQUENCE LENGTH:207
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
20 CLONE:HUMGS02341
SEQUENCE DESCRIPTION:
GATCACTTCT GAATAAGCAG TTTGCCTTTA TAAAACTTG CTGCCTGNCT AAAGATTAAC 60
AGGTTATAGT TTAAATNTGT AATTAATGCT ACCATCTTGC AATAAAGTGA CAATTGAATG 120
25 NAACAGGGTT TTTCAAGTTG TATAATTCTC TGAAATACTC AGCTTTTGTC ATATGGGTAA 180
AANTTAAAGA TGTCATTGGN CTACAAA 207

SEQ ID NO:2058
SEQUENCE LENGTH:120
30 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02342
SEQUENCE DESCRIPTION:
35 GATCTTTACT CTTGAGAAAT GAATAAGCTT TCTCTCAGAA ATGCTGTCCC TATACACTAG 60
ACAAAAGTGA GCCTGTATAA GGAATAAATG GGAGCGCCGA AAAGCTCCNT AAAAAGCAAA 120

SEQ ID NO:2059
SEQUENCE LENGTH:119
40 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02343
SEQUENCE DESCRIPTION:
45 GATCCAAGGT ATCCTAACA NTGGAGCAGC CAAGTTTNTT TTCAGGCACA ATGACCCTGA 60
CCACCTAAAG AAAGTTNTAG AGAAGTNTAA CCCTAAGATA CCCAAAATTT TGGCCTTTN 119

SEQ ID NO:2060
SEQUENCE LENGTH:127
50 SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

5 TOPOLOGY:linear
 CLONE:HUMGS02345
 SEQUENCE DESCRIPTION:
 GATCCCTCT TCTCAGACAG CGCCAGGCCG GGGTGGGGCC GGGGTTGGG CCGAGCCCCA 60
 CAGCTGCCCC CCTCCNTCC CTTTTGTAT AATTAAATAA AGAAATGGTC GCGCTTCTGT 120
 TTTTAAA 127

10 SEQ ID NO:2061
 SEQUENCE LENGTH:117
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS02346
 SEQUENCE DESCRIPTION:
 GATCGAGGTG GAGAAGATGC GCGGGCGGA GNCTTATNAC CGNNTAGAGA ACAGCCCACA 60
 GNTGGATGGG AGCCCCCAG GGCTCGAGGG TCTGCTGGG GGCATTGGG AGAAAGN 117

20 SEQ ID NO:2062
 SEQUENCE LENGTH:115
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS02347
 SEQUENCE DESCRIPTION:
 GATCTGCTGA GGACACATGC GCTTTTGTAG AATTAAACAT CTGGTGTITT TCTGAAAAA 60
 TATATATACA TATATTGCTT TATTGAAAC AATNAAAAT ATGCTGCATT TGAAG 115

30 SEQ ID NO:2063
 SEQUENCE LENGTH:114
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 35 CLONE:HUMGS02348
 SEQUENCE DESCRIPTION:
 GATCTGGAGG AGGTGAAGGC CAAGGTGCTG CCCGCTGGGC CTCCAACGG GCCCTCCTCC 60
 CCTCCTTGCA CCGGCCCTTC CTGGTCTTTG AATAAAGTCT GAGTGGGCGG CAAA 114

40 SEQ ID NO:2064
 SEQUENCE LENGTH:114
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 45 CLONE:HUMGS02349
 SEQUENCE DESCRIPTION:
 GATCCAAAGT ATCAGGTCTG TTAGTGGCCA TCAGCACTTT AATATTGCCT CGAGGAGGAT 60
 TTCTTGGNCN CNNNAAATAA GGTCAATTAAG TCTTATGCCA AATTCAGTGC TCCN 114

50 SEQ ID NO:2065
 SEQUENCE LENGTH:113

55

SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02350
 SEQUENCE DESCRIPTION:
 GATCCTAGAT AAGCAGGTGA AATTTAGGCT TCAGAATATA TCCGAGAGGT GGGGAGGGTC 60
 CCTTGGAAGC TGGTGAAGTC CTGTTCTTAT TATGAATCCA TTCATTCAAG AAA 113

SEQ ID NO:2066
 SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02351
 SEQUENCE DESCRIPTION:
 GATCTACGCT GTGCCTTGGC AGGGCACAAT GACCTTNTAG ANATCCACCT GTTAGAACGC 60
 CTAGGGGTCT GAACCGGGCT GGNCTGANNC TATCACCTCT TATGCACAN 109

SEQ ID NO:2067
 SEQUENCE LENGTH:108
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02352
 SEQUENCE DESCRIPTION:
 GATCCCAAGG CTAGCCTGT GAAGGTCTCC TATCGGAAGA NTACCCCAT NNAATGGGAA 60
 GTGGAATTCC TGGTCAANTT GGTCTTNATG CTCTGGAAGA CGTAAGAN 108

SEQ ID NO:2068
 SEQUENCE LENGTH:108
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02353
 SEQUENCE DESCRIPTION:
 GATCTTAAGC AAAAATACTC ACTGAAATAG TATGTGGATG AATTCACCTA CTTACAATTT 60
 TATGGTTTCT TTGTAAATAA TAAATGTGAA TCTCAATTCT GCTTTAAA 108

SEQ ID NO:2069
 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02354
 SEQUENCE DESCRIPTION:
 GATCCTNGGC TCCACCTGGG TGGCCCTGAC CACGGGAGCC TTGGGCCTAG AGCTGCCCTT 60
 GTCCTNCCAG GACCCCNCC TGGCCACTGC CCGCCTACTN NCTN 104

SEQ ID NO:2070
 SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02355

SEQUENCE DESCRIPTION:

GATCAGAGCT GCTGAGTTCA GGATGCCTGC GTGTGGTTTA GGTGTTAGCC TTCTTACATG 60
 GATGTNAGGA GAGCTGCTGC CCTCTGGCG TGAGTTGCGT ATTCAGGCTG CTTTGTCTGC 120
 CTTTGGCCAG AGAGCTGGTT GAAGATGTTT GTAATCGTTT TCAGTCTCCT GCAGGTTTCT 180
 GTGCCCCGTG GGTGGAAGAG GGCACGACAG TNCANGCGCA NGTTCCTGGG CTCCTCAGTC 240
 GCAGGGGTGG GATGTGAGTC ATGCGGATTA TCCACTCGCC ACAGTTATCA GCTGCCATTG 300
 CTCCTGTCC TGTTCCTCCA CTCCTTATT TGTGCATTG GTTTGGTTT CTGTAGTTT 360
 AATTTTTTAA TAAAGTTGAN TAAANTATA AAAANAAGAG NNGGCGNN 408

SEQ ID NO:2071

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02356

SEQUENCE DESCRIPTION:

GATCAAAAGC TTATTCATCT TTTTCTTTT TCCTTTGGTG TAAAGCCAAC ACCCTGTTTA 60
 AAAANCATAA TTCNTTAAN CNATTTTCCC TCTTCTCNT N 101

SEQ ID NO:2072

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02357

SEQUENCE DESCRIPTION:

GATCAAAAAA AGAGTTTGAA GCTAATTTG GCAAAATTCA GGCAAAAAA GTAAGGCCAT 60
 TATTTAACCC TGTGGCACCA TTAAATGTTG AAGAATGACA AA 102

SEQ ID NO:2073

SEQUENCE LENGTH:95

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02358

SEQUENCE DESCRIPTION:

GATCTTTTTT GTCAGTTTGT TTGTATGAAA CTAAAGCCNT TATTTGTTAA TAGTTCCTGC 60
 TAAAACAATG AATAAAACT CAAGGAGCAA CTA 95

SEQ ID NO:2074

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02359

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCGTCTCT AGGATGATAT GCATGTTTCA AGTGGTATTG AAAGCCGCAC TGATGGATAT 60
GTAATAATAA ACATATCTGT TATTAATATA AA 92

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SEQ ID NO:2075
SEQUENCE LENGTH:101
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02360
SEQUENCE DESCRIPTION:
GATCTAAGTT AGGAAAGACG ATGGAGGTGG AATCCTTTAA GATTATNTCC AGTTATTTGC 60
TTTAATAAAG AAGAAGTTAC CCTTGTCAAA ATCAGAACAA A 101

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SEQ ID NO:2076
SEQUENCE LENGTH:87
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02361
SEQUENCE DESCRIPTION:
GATCTTCATT TATTTAATG GTAATGGTTT TAAAATATGT TCCTGATTGT ACATATTNTA 60
AAATAAACAT GTTTTTTAAC ATGCAAA 87

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SEQ ID NO:2077
SEQUENCE LENGTH:88
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02362
SEQUENCE DESCRIPTION:
GATCACAAC ATTCAACAAA AAAGTAACT TATGTGACTT GGCAGTTATT CTATACCATT 60
TCCTGTCCAT TAAAATTTT AAAGGAAA 88

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SEQ ID NO:2078
SEQUENCE LENGTH:85
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02363
SEQUENCE DESCRIPTION:
GATCCCATTT AATATTTAAA AAAATCAGTA GCACAAATAT ATNTNAATTG TCAACTTACA 60
AAATAAAATA CATTTACAGT CTAAA 85

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SEQ ID NO:2079
SEQUENCE LENGTH:82
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02364
SEQUENCE DESCRIPTION:

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GATCATCAAA AAAGAGGTAA TCTACGTTAT TTCCTATTCT AATGTCCTTT CCTAATAAAA 60
 AACTTCAACT TTCTAAGTTA AA 82

5 SEQ ID NO:2080
 SEQUENCE LENGTH:80
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02365
 10 SEQUENCE DESCRIPTION:
 GATCCTTTTCG GAATTGCACT TTTACATGTT GGGCGAATTT GTGTCCGTGC TGAAGTTTAT 60
 TAAAGGAAAA TAGATGGAAA 80

15 SEQ ID NO:2081
 SEQUENCE LENGTH:80
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02366
 20 SEQUENCE DESCRIPTION:
 GATCAAGCCT TGCTTGAGAT TGGCCTTACC TCTGGNCNTT TTTTGTATA TGAGCTAATA 60
 AATNCTGTTT ATTGTTTAAA 80

25 SEQ ID NO:2082
 SEQUENCE LENGTH:80
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02367
 30 SEQUENCE DESCRIPTION:
 GATCCATGAA GTNATTCAGT GGAAANATGC ACGTTNATAC TATTTNAGAG CACAAATAAA 60
 CTCACATATAC AATGGTCAAA 80

35 SEQ ID NO:2083
 SEQUENCE LENGTH:76
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02368
 40 SEQUENCE DESCRIPTION:
 GATCAAACCT CAAAGCAGCT TTNACTTGGA ATTTAAAAAT AAACAGTTCA AAGATACTCT 60
 ACATTATCAC CNTAAA 76

45 SEQ ID NO:2084
 SEQUENCE LENGTH:70
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02369
 50 SEQUENCE DESCRIPTION:

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GATCCATTTTC ATGCAGGATT GTGTTGTTTT AACTGTTGTT GAGGAACTA ATAAATAATT 60
AAATTGTAAA 70

5 SEQ ID NO:2085
SEQUENCE LENGTH:64
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02370

10 SEQUENCE DESCRIPTION:
GATCTAAGAT GTCCCAGGTC CTGGGAAGTT TACTCAATAA AGCTGGCTTT CCCCTGCCCT 60
CAAA 64

15 SEQ ID NO:2086
SEQUENCE LENGTH:64
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02371

20 SEQUENCE DESCRIPTION:
GATCCGTGTG AATGATGTGA ACATTTTATG AGTTTAAATA AAGTCATCTT ATGGTGTGTC 60
TAAA 64

25 SEQ ID NO:2087
SEQUENCE LENGTH:61
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02372

30 SEQUENCE DESCRIPTION:
GATCTTAAAA TCAGTGATTA TCTTTTCTA AATAAAATAT CACCAGAATT CATCAGTTAA 60
A 61

35 SEQ ID NO:2088
SEQUENCE LENGTH:60
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02373

40 SEQUENCE DESCRIPTION:
GATCTAAGAT GTCCCAGGTC CAGGAAGTTT ACTCAATAAA GTGGCTTTCC CTGCCANAAA 60

45 SEQ ID NO:2089
SEQUENCE LENGTH:66
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02374

50 SEQUENCE DESCRIPTION:
GATCTCCGGG CAGCCACCAC CTCCTCGGTC TGCCCCCTCA TTAATAATCA CGTCCCACC 60

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CTGAAA

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SEQ ID NO:2090

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02375

SEQUENCE DESCRIPTION:

GATCATGCAA AGAAACTTC CAAAAGATT TATTAACCTA AACCAGCCTC TNTNGCAA 59

SEQ ID NO:2091

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02376

SEQUENCE DESCRIPTION:

GATCTCAAAT TGCCTCTGAA CCTTTTATAA GACAGTTTAT CTTCAAATAA ATTTATTTTG 60
CAATACCACG CAAA 74

SEQ ID NO:2092

SEQUENCE LENGTH:56

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02377

SEQUENCE DESCRIPTION:

GATCAAAGTC TATTTTGCAT AAAATGTCCA ATAATTAAAT ATTGTTATAA AATAAA 56

SEQ ID NO:2093

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02378

SEQUENCE DESCRIPTION:

GATCGGCAGT TGGGAGGGGC GCTCTGAGAT TAAAGAGTTT TACCTCTGAG AATAA 55

SEQ ID NO:2094

SEQUENCE LENGTH:54

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02379

SEQUENCE DESCRIPTION:

GATCCANTCT TTGACAAACT GAAAAGAACT GAAAATAAAC ATTGCTCTTT CAAA 54

SEQ ID NO:2095

SEQUENCE LENGTH:52

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02380

SEQUENCE DESCRIPTION:

GATCCCTGCC CCTCCCCACT GGGACGGAAT AAATGCTCTG CAGACCTGGA AA

52

SEQ ID NO:2096

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02382

SEQUENCE DESCRIPTION:

GATCTGCTTA TAGAGCAGGA AGAATAAAGC CACCAACTTT TACCTAGCCC GGCTAATCAT 60
GGAAGTGTGN CCAGGCTTCA AGTAACTTGA GTTTTAATTT TTTTTTTTC TTGGNAGAGT 120
AATGTAAAAT TTAATGGGG AAAGATATTT AANATTTAAT ACTAAGCTTT AAAAAGAAAC 180
CTGCTATCAT TGCTATGTAT CTTGATGCAA AGACTATGAT GTTAATAAAA GAAAGTACAG 240
ANGACACTTG GCATTCAAAG NTTAAA 266

SEQ ID NO:2097

SEQUENCE LENGTH:451

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02399

SEQUENCE DESCRIPTION:

GATCTAGAGA GTGCTCAGAA TTAGGGCCTG GCATTTGGAA TCACAGGANA TATCATCACA 60
GAAACAACTG TTTTAAGATT AGTTCCATCA CTCTCATCCT GTATTTTNAT AAGAAACACA 120
AGAGTGCATA CCAGAATTGA ATATACCATA TGGGATTGGN GAAAGACAAA TGTGGAAGAA 180
ATCANNGNGC TGGAGACTAC TTTTGTGCTT TACAAAACCTG TGAAGGATTG TGGTCACCTG 240
GAACAGTCTC CAATCTATGT TAGCACTATG TGGCTCAGCC TCTGTTACCC CTTGGNTTAT 300
ATATCAACCT GTAAACATGT GCCTGTAAC TACTTCCAAA ATCAAANTCA TACTTATNG 360
AGGAANATTC TGATTTTNTA GANAAAAANT NGAGCNAGGN GATTATANCN TGTITGCAAG 420
TCATGTGGTT TCTTTCTCAA TNGGGGNNA N 451

SEQ ID NO:2098

SEQUENCE LENGTH:441

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02400

SEQUENCE DESCRIPTION:

GATCCCAAAC TGTTCCCTTT TTCATTTCTT GAAATGTTAC CACTACAGAC ATTTTTTNAA 60
GGTGAATAAA CAGTTGTNAT GTGCTGTACC TAAAATCATG TTAAATCGTA TAAGGAAACA 120
TTTCAATACA CTTATACAGG AAGAAAACCTA TAGATGAAGT ACATGTGTGT GATTCACTCT 180
GATTACAGA ATTCTGAGAG TAATATGGAA TAAAACAACT CCACTTAGAT GATAACTGAA 240
GCATTTCTG CTTGTGAAA ATTTGGNTTT TAAATTGCTG TTAGAATGGG NAATTTGGAC 300
ACTTTATATC ATGTATANT TNCAGACTTT AGNTTCTGTA TCTNTTGGGA ACCATGGTTA 360

TAGCAAAACC NTGGNAATA ATCCTGTTTC CNANACCNC CTNNATGTAA ACCTGGTATG 420
CTTGGCTGGT AACNCCTAAG N 441

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SEQ ID NO:2099
SEQUENCE LENGTH:440
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02401

SEQUENCE DESCRIPTION:

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GATCTATGTC TNCTGCCTGG CTCCTAGATG GCTCTCCGGG CAGGTNCTGG CCAAGGACAT 60
CATCTAGGCA GGGGGAGAGC CTGGNCTGAA CAGCTGTNAC CAAAACCTCC TTCTNCCCCA 120
CCCTGCCCCC TCCACTTCCT GCCCTCTGTT CCATCTTCCC CCTTCCCAA GGCACAGCC 180
TTTATTCCAG GCCCAGGGAT GTAGGAGGGG GAAGGAGGAA ACAGGAAGCC CAGAGAGGGC 240
AAAGGGCCTA CCTCGGGGCG CGAACCATGC CCCANACTAT TATCTCAGGG CTTTCTGGGC 300
ACTNGCACTT CAGCGTGGCC CACCTGCCCA TGCCCTGAGG CCAGTTNGCG AGGGGTGGCT 360
CCTGAGGGTT TTTATAACCT TTGTTTGNTA ATGTTTAATT TTTGCATCAT AATTTCTACA 420
TTGTCCCTGG AGTGTAAGAN 440

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SEQ ID NO:2100
SEQUENCE LENGTH:411
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02402

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SEQUENCE DESCRIPTION:

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GATCAAAAGG CTGAAAGGTT TGCTCACCCA GCACGGCATC CCCTACACGA GGGCCACAGA 60
AACTTCCAAC TTGGAGCACT TGGGCCACGA GACGCCCAGA GCCAAGTCTC CAGAGCAGCT 120
GCGGGGTGAC CCAGGACTGC GTGGGAGTTT GTGACCTGT GGTGGGAGAG CAGAGGTGGA 180
CGNGGCCGAG AGCCCTACAG AGAAGCTGGC TGGTAGGACC CGCAGGACCA GCTGACCAGG 240
CTTGTCTCA GAGAAGCAGA CAAAACAAAG ATTCAAGGTT TTAATTAATT CCCATACTGA 300
TAAAAATAAC TCCATGAATT CTGTAAACCA TTGCATAAAT GCTATAGTGT AAANAAATTT 360
AACCAAGTGT TACTTTAAAC AGTTCGTACA AGTAATGNTT ATAATTCTAA A 411

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SEQ ID NO:2101
SEQUENCE LENGTH:408
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02403

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SEQUENCE DESCRIPTION:

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GATCTGGAAA GCTTGAGCCT CCTTGGGTTT GTCTACAAAT TGGAAGGAAA TATGAATGAA 60
GCCCTGGAGT ACTATGAGCG GGCCTTGAGA CTGGCTGCTG ACTTTGAGAA CTCTGTGAGA 120
CAAGGTCCTT AGGCACCCAG ATATCAGCCA CTTTCACATT TCATTTCATT TTATGCTAAC 180
ATTTACTAAT CATCTTTTCT GCTTACTGTT TTCAGAAACA TTATAATTCA CTGTAATGAT 240
GTAATCTTG AATAATAAAT CTGACAAAAT ATTAGTTGTG TTCAACAATT AGTGAAACAG 300
AATGTGTGTA TGCATGTAAG AANGAGAAAT CATTTGTATG AGTGCTATGT AGTAGAGAAA 360
AAATGTTAGT TAACCTTGTA GGAATAAAAA CATTGGACTT AACTAAA 408

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EP 0 679 716 A1

SEQ ID NO:2102

SEQUENCE LENGTH:397

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02404

SEQUENCE DESCRIPTION:

GATCCGAGAG GTGGCCAACA AAGTCAAGGT CCCCTGCTG GATTAGGCA GCCCCAACT 60
GGCCATGCAC TCTATCCGGN AGATGGCCTG CACCACAGGA GTCCTCCANA CCCTNACCCT 120
CTTCAAGGGC TTCTTTAAGC TGITCCCTTC TCTAAGCCAT AATCTCTNAG TGGATTGAGC 180
CCTCTTGGA AGACTTCTCT GCCATCCCTT TGCACCTGAN AGGGGAAGTT CTCAGCTGAG 240
CTGAAGCTGG ATTATTAAAG TGGATTGTAA CTCAGACTCT CCGTGCTACG CTTATTTGGA 300
GACTAGAGGA GTGGGAGTTG AGCCTGGCTT GAACCTTTGG AACCAGAAAA GTTGGGGAGC 360
AGGTGGAGGA GGCCACACTC CTGGGAGCTT GATGGTN 397

SEQ ID NO:2103

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02406

SEQUENCE DESCRIPTION:

GATCAGCCCT TTTTCCATC CTGCCCTATG GTTCTCTAGC CACCTGTGCA TGCATGTGTA 60
TTTCTGCCTN GTTCTATGGT GTGTGGATGT GTGTGCATGA ATCTGTCATA TAGAGGGGGT 120
CCGAGCTGGA ATCCTAGAGC ATTGCTGCCC TGGGGCCTGA TGTCTTGGC TTCCTCAGAG 180
CATGTAACAG GAAATTAAAT GGGATGAGTG TTTGGTAAA 219

SEQ ID NO:2104

SEQUENCE LENGTH:380

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02408

SEQUENCE DESCRIPTION:

GATCCTACCT CCAACTCCTG ACTCTATAGG TCTCACTCTT TTTTATTGT CCTANNNNNTA 60
CATAACATAA AATTTATAAA TTAAATATTC TAGGGTATAG TTCAGTGGTA TTAAGTACAT 120
TCACACTGAT GTGCAACCAT CATTATCATC CATTCCCAA ACTTTTCATC ACCGCAAATA 180
GAAAAGCTGT ACCCATGAAA CAATAACTTC CATTGCCTCC CCCTCAGCCT TTGGTAACCT 240
CTATTCTACT TTCTGTTTCT ATGAATTTGA CTGTTCTAGG TACCTCATAT AAGTGGAATC 300
ACACAATATT TGTCCCTTTG TGTCTAACTT ATTTCACTTA GCATGTTTTT AAGATTTATC 360
TGTACTGTAC CATGTATCAN 380

SEQ ID NO:2105

SEQUENCE LENGTH:378

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02409

SEQUENCE DESCRIPTION:

GATCTGTGCT CTCCTAGCCC AAGAGACCCC TGGAGGGGCT GGAGTTTAT CCAGCGNCTC 60
 GTCGTATGTT TGGCTGAGCA CCTGTGGCCT GGGTGCAGGT TAACTTCTTG TTATCAGGAG 120
 CCCACTATGC AGAGGCCAAA GGTGGGCAGC CAGCGAGGCT ATGAATTGGA CCTTTTGGT 180
 ATCTGTGTNA CTGNTCTGTG NCCATNCTTA GNCAACTTGC TGGCGTGACA AGTGCCACACA 240
 AGTAACACAC CAGGTACCCA GAGNAGGGTG GACAGGAGAG ACCTGAATNA CAGCAGTANG 300
 GAATTCCTCA ANGNTGTGNC CTCGCCCATG AANTTGTTCC AANTTGAAGG TNANNAGGGN 360
 CACCAATCAG GGTGAGN 378

SEQ ID NO:2106

SEQUENCE LENGTH:374

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02411

SEQUENCE DESCRIPTION:

GATCCAGAAG TACAAGGTGG TCCTGGCCCC GGAGACGGNG GAGTTGAAGA GTGTGGCCCC 60
 CATTGTCTCTG GTTCCCAATA AGAAAGTGGG CCTGCAGTTC CTGCAGAGAC AGTGCTGAGC 120
 TGAGTCTCCG CCTTGCTGGG GCTTGTCTTA GAGGCTCCAG CTCTGGCACA GTGGTTCCTG 180
 GCTGCTGCCA TGTCTCANAT GAGGAGGGAG AGAAGGAGGC CGCCAGACTC GAGAGGTGGG 240
 AGGAACTCCT TGCACACACC CTGAGCTTTT GCCACTTCTA TCATTTTGA GAACTCCCTC 300
 TCAGCTAAAA GGCCACCCTT TTATCGAATG CTGTCCTTGG GAAGATATAA AATAAAGGGC 360
 TTTTATTCT TAAA 374

SEQ ID NO:2107

SEQUENCE LENGTH:369

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02412

SEQUENCE DESCRIPTION:

GATCCAGCCC GACCTGCGAG ANTGATGGAG ACCATGCACC GCATGAGCCA CCTCCCACCC 60
 GACTTTGAGG GCCGCCAGAC GGTCAGCCAG TGGCTGCAGA CCCTGAGCGG ATGTCGGCGT 120
 CAGATGAGCT GGACGACTCA CAGGTGCGTC AGATGCTGTT CGCCTGGAGT CAGCCTACAN 180
 CGCCTTCANC CGTTCTCTNA TGCCTGAGCC CGGGGANTAG CCTTGNACAG CCGGGAGAGT 240
 CTGAGGCNTG GTCCTGGTCC CTGTCCGCAN AGAGGCCGTG NNATCACANA GCTANTGTCT 300
 GAGTGGCTGT CTGGNTCTGC TTTGGGTAAG ACTTTGGGGC CGGCCTCCCA NAATAAGGTG 360
 TCTCGGAAA 369

SEQ ID NO:2108

SEQUENCE LENGTH:368

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02413

SEQUENCE DESCRIPTION:

GATCAGAGCC AAGAAGCGTC TCGGCAGAG TGGGAAGAG TTGCCGCCAA CCTCCTAGGC 60
 GCCCCGCCCA GTCCTTTTG ACCCTGGGG CAGGGCAGGG GGCAGGGAGA GACAAGGCTG 120

EP 0 679 716 A1

5 CTGCTATTAG AGCCCATCCT GGAGCCCCAC CTCTGAACCA CCTCCTACCA GCTGTCCCTC 180
 AGGCTGGGGG AAAACAGGTG TTTNATTTGT NACCGTTGGA GCTTGGATAT GTNCGTGGCA 240
 TGTGTGTGTN TGTGTNANAG TGTGAATGCA CAGGTGGGTA TTTAATCTGT ATTATTCCTC 300
 GTTNTTGGAA TTGNNTTCCC CNATGGGNCCT GGGGTACTTT ACATTCAATA AATACTGTTT 360
 AACCCAAA 368

10 SEQ ID NO:2109
 SEQUENCE LENGTH:368
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02414

15 SEQUENCE DESCRIPTION:
 GATCACAGGA AGTGGAGGAG CCAGAGGTGC CTTTGTGGAG GACAGCAGTG GCTGTGGGA 60
 GAGGGCTGTG GAGGAAGGAG CTTCTCGGAG CCCCTCTCA GGCTTACCTG GGCCCTCCT 120
 CTAGAGAAGA GCTCAACTCT CTCCCAACCT CACCATGGAA AGAAAATAAT TATGAATGCC 180
 ACTGAGGCAC TNAGGCCCTA CCTCATGCCA AACAAAGGGT TCAAGGCTGG GTCTAGCGAG 240
 20 GATGCTTGAA GGAAGGGAGG TATGAGACCG TAGGNANAAN GGCACCATCC TCGTACTGTT 300
 GTCACTATGA GCTTAAGAAA TTTGATACCA TAAAATGGTA AAGACTTGAA AAAAGTANAA 360
 NATGTTTN 368

25 SEQ ID NO:2110
 SEQUENCE LENGTH:368
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02415

30 SEQUENCE DESCRIPTION:
 GATCTTGGTT TTGATGTGGA CATAGGCCCT CTTTCCAGA CTCCTCGTGA AGTGGCCCAG 60
 CAGGCTGTGG ATGCGGATGT GCATGCTGTG GBCGTAANAC CCTCGCTGCT GGTCAATAAA 120
 CCCTAGTTCC TGAAGTCATC AAAGAACTTA ACTCCCTTGG ACGGCCAGAT ATTCTTGTC 180
 35 TGTGTGGAGG GGTGATACCA CCNTCAGGAT TATNAATTTC TGTTTGAAGT TGGTGTTC 240
 AATGTATTTG GTCCTGGGAC TCGAATTCCA AAGGCTGCCG TTCAGGTGCT TNATGATATT 300
 GAGAAGTGTT TNGAAAAGAA GCAGCAATCT GTATAAAATA AAAATATCAC AAGAGAACAC 360
 CTGTACTN 368

40 SEQ ID NO:2111
 SEQUENCE LENGTH:365
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02416

45 SEQUENCE DESCRIPTION:
 GATCGAAAGA AATCTAAGTG ATACGGCCCA ATGAAGCTAA AATATAGCCT TCTGTTAAGC 60
 AAATAGTATT TCCTTTCCCC AAGTAGTTCA TTTTCTAGAT GCTTGTCAAA TGAATTAATG 120
 TCCTCTGATG AAGAGTGTCC TTCCGTTTCT AAGGTCTTCT CAATCTCAGC AATAGAGCTT 180
 50 CCCAGCAGCG TTCAAGACAC ATCATTTATA CACAGGCACA GGGGCCTTCC TGAATGGGT 240
 GCATTTTAC CAACTACAAT CATGTAATTT TTTTGGAAAT TTTTAAAAT TTTGNTNCT 300

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TTACATTACA ATTGGGTGAA ACACATTTTA CAGCTCTCAA TAAATGTTTG CTGGTCGCTC 360
TGAAA 365

5 SEQ ID NO:2112
SEQUENCE LENGTH:363
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02417

10 SEQUENCE DESCRIPTION:
GATCAACGAT TACGTGGAGA AGGGTACTCA AGGGAAAATT GTGGATTGG TCAAGGAGCT 60
TGACAGAGAC ACAGTTTTN CTCTGGTGAA TTACATCTNC TTTAAAGGCA AATGGGAGAG 120
ACCTTTTGAA GTCAAGGACA CCGAGGAAGA GGACTTCAC GTGGACCAGG TGACCACCGT 180
15 GAAGGTGCCT ATNATGAAGC GTTTAGGCAT GTTTAACATC CAGCACTGTA AGANGCTGTC 240
CAGCTGGGTG CTGCTGATGA AATACCTGGG CAATGCCACC GCCATCTTCT TCCTGCCTGA 300
TGAGGGGAAA CTACAGCACC TGGAAAATGA TTGACCAAAA TACCAAGTCT CCCCTTCTTC 360
ATN 363

20 SEQ ID NO:2113
SEQUENCE LENGTH:362
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02418

25 SEQUENCE DESCRIPTION:
GATCCCAGTC GCATACCAGG TGTCTCCTC CAGGTCGTGA ACGGCAAAGG CACTGCCCCG 60
ATCGCCATAG CAGGTGTCTT CTGGTACTT AGACATGCCA GCACAGAAGG TGTGTTTATT 120
CAGTATGGGC TGCACCCCTA CAGGGCTCTT CGGTGTCTTC CATCCAGGAC TGGGTTTACA 180
30 AGACCATAGC TGAGAACTAA TGCAAGGCTG GCCGGAAGCC CTTGCCTGAA AGCAAGATTT 240
CAGCCTGGAA GAGGGCAAAG TGGACGGGAG TGGACAGGAG TNGATGCGAT AAGATGTGGT 300
TTGAAGCTTG ATGGGTGCCA GCCTGCATTG CTGAGTCAAT CAATAAAGAG CTTTCTTTT 360
GN 362

35 SEQ ID NO:2114
SEQUENCE LENGTH:362
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02419

40 SEQUENCE DESCRIPTION:
GATCNGACAG GCACCAGCAA TGACACAGCA TAACTGTTG GGCACAGGAA AGAGGCTTGA 60
CACCACCAGC CCACCAGGAA ATGCAGTTCA GCCACCACGA GGACACGAGG AACCTGCACC 120
45 ACAGCCGCAG TCAAGAGAAT GCTGGTGGTG CCAAGNTGCA GGGTGTGGCC TGCTGGAATG 180
GAAGCGCATG GTGGTNNCTA TAAAGTCAAT GNCACAGCAC ATGCCAGCA ATCCACTGTG 240
GGATTNGNGA TGANACTANG CNCATAAAAC TGTNCGAATT TTNCTGTGCT TTTCATATCN 300
TCAATNTGAA TCAANTGCTT CATTGGGTAC TGTAAGTGTG GNTACTTNAG TGAATCTCTN 360
TN 362

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SEQ ID NO:2115

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02420

SEQUENCE DESCRIPTION:

GATCATATAG TAGGTTTAGG TTTAACTTTT TAAGAAATTG CCAAGCTTTT CCAAAGTGGC 60
 TGTCCTCTT TACATTTCCA CCAGCAATGT ATAATGAATG GTTCAGGTTT CTCCACATTC 120
 TTGTCGGCAC TTGGACTTTT CTGTTTGTG GTAGCCATTC TAGTGGATGC AAAGTGGCAT 180
 CTCATTATGG TTCATTTGCA TTTCTCTGAC AACTAATGAT TTTGAGCATC TTCATGCGAT 240
 TGTAAACCAT TTGTATATCT TTAGTGAAAT ATCTATTCAA TTATTGCCCA TTTTAAATT 300
 GGNTCACATG GCTNATTAAT GNATTGTAAG AAAGGTTTAC ATATTCCTGG ATACN 355

SEQ ID NO:2116

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02421

SEQUENCE DESCRIPTION:

GATCATGATT TTGTAGTACA GGAAGACTTC ATGAAAGCAG TCAGAAAAGT GGCTGATTCT 60
 AAGAAGCTGG AGTCTAAATT GGACTACAAA CCTGTGTAAT TTAGTGAAG ATTTTGTATG 120
 GCTGCATGAC AGANGTTGGC TTATTGTAAA AATAAAGTTA AAGAAAATAA TGTATGTATT 180
 GGTAATGATG TCATTAAGAG TATATGANTA AAAATATGAG TAACATCATA AAAATTAGTA 240
 ATTCAACTTT TAAGATACAG AAGAAATTG TATGTTTGT AAAGTNGCAT TTATTGCAGC 300
 ANGTTACAAA GGGGAAGTGT TGAAGCTTTT CATATTTGCT GCGTGACATN 350

SEQ ID NO:2117

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02422

SEQUENCE DESCRIPTION:

GATCCGCAGN CAGAAGCTCT GCCCTTCTGT ATCCTATGTA TGCAGTGTNN TTTNCTTGC 60
 CAGCTTGGGC CATTCTTGCT TAGACAGTCA GCATTTGTNT CCTCCTTTAA CTGAGTCATC 120
 ATCTTAGTCC AACTAATGCA GTCGATACAA TGCCTAGATA GAAGAAGCCC CACGGGAGCC 180
 AGGATGGGAC TGGTCGTGTT TGTNCTTTN TCCAAGTCAG CACCCAAAGG TCAATGCACA 240
 GAGACCCCGG GTGGGTGAGC GCTGGCTTCT CAAACGGCCG AAGTTGCCTC TTTTAGGAAT 300
 CTCTTTGGAA TTGGGAGCAC GNTGNCTCT TGAGTTTGA GCTTTTAAAA GTACTTTNTT 360
 TACCACATTT GAAAA 375

SEQ ID NO:2118

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02423

SEQUENCE DESCRIPTION:

GATCTCTAAC CAGAAATAAA CAGGAAGACT CAGTNGTTTA CAAAAGACAT TTTAGTTTTA 60
CACGTACAGA AAATTCTACC CNGGCATTAC AGAATTCTTA GACTTCTTAA ATTCCTGATT 120
TTCCTTGGTA TTTACATTTT GATAAGGGAG CCAATGGTTC TTCAAACATT TGAAAAGAAC 180
ACATACACAC TGGACAATTT CAAACGNTAC AAACAAACGC AACTGTCCTT CTTTCTCATT 240
CCTGTCCCTC AGCCACCCAG TTTCTTCTCC CCTGAGGGAA TCAGTTATCA TTNGCTGGGT 300
CATACTTCCA GATTATCCTG TGCCTATGTA AGTGTGTGN 339

SEQ ID NO:2119

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02424

SEQUENCE DESCRIPTION:

GATCTGGGAC GTNCACGAGT NAGGGGCTGG CCACCCAGCC CACAGCCTTG CCTGACCACC 60
CTCCAGCAGA TAGACGCCGG CACCCCTTCC TCTTCCTAGG GTGGAAGGGG CCCTGGTNCN 120
NGCCTGTAGA CCTATCGGNT CTCATCCCTT GGGATAAGCC CCAGTCCAGG TCCAGGAGGC 180
TCCNTCCCTG CCCAGCGAGT CTTCCAGAAG GGGTGAAAGG GTTNCAGGTC CCGACCACTG 240
ACCNTTCCCG GGTGNCCTCC CTCCCCANCT TACACCTNAA GCCCAGCACG NAGTAGNCTT 300
TGAACAGAGG GAGGGAAGGA CCCATGGGTC TCCN 334

SEQ ID NO:2120

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02425

SEQUENCE DESCRIPTION:

GATCAAAGAG AAAATAAAAA ATCGCTACTT CCCTGCCTTT GAAAAAGTCT TAAAGAGCCA 60
TGGACAAGAC TACCTTGTG GCAACAAGCT GAGCCGGGCT GACATTCATC TGGTGGAAGT 120
NCTCTACTAC GTCGAGGAGC TTGACTCCAG TCTTATCTCC AGCTTCCCTC TGCTGAAGCT 180
CTCCAGGACA CTGGCCCCC AACTGTATC TCTCACTGAG AAAAGGTGGT CCCATGGCCC 240
TGAAAACCCAG AATNAGCAAC CTGNCCCACA GTGAAGAAGT TTCTACAGCC TNGGCAGCCC 300
AAGGAAAGCC TCCATTGGA TGAGAAATCN 330

SEQ ID NO:2121

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02426

SEQUENCE DESCRIPTION:

GATCGAAGTA AAATAGAAAT GGGACTNGCT TTCCACAGGA AGTAAACTGC TTCAGAGCCC 60
ACAGTCCCCT GCTCAGTGTC CGGAAAGAAG TCAGTCATCC CTGTTGGCAG TAAATCTTCC 120
CACAGGCCGT CCATTAGAGA TTTAACTAGA TATGTTCAAT AGAAAGAGTC TGAGGCAAGT 180
GGAATGAGG NNCGGAAACT TAGGTTGGGA GAATATTTT NTTNATTTCA TTCTGTTTGC 240
TTAATTCAGA GTACAGTTTG TGCTATTTC TATCTGTACT CCAGGCAGAA ATATAACTTG 300

AAAATACTGT GTCTAAAGAA ATTTCAN

327

SEQ ID NO:2122

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02427

SEQUENCE DESCRIPTION:

10 GATCCTCGTC ATCAAGGATG GCTGCATCGT GGAGAGGGGA CGACACGAGG CTCTGTTGTC 60
 CCGAGGTGGG GTGTATGCTG ACATGTGGCA GCTGCAGCAG GGACAGGAAG AAACCTCTGA 120
 AGACACTAAG CCTCAGACCA TGGAACGGTG AAAAAAGTTT GGCCACTTCC CTCTCAAAGA 180
 CTAACCCAGA AGGGAATAAG ATGTGTCTCC TTTCCCTGGC TTATTTTCATC CTGGTCTTGG 240
 15 GGTATGGTGC TAGCTATGGT AAGGGAAAGG GACCTTTCCG AAAAACATCT TTTNGGGGAA 300
 ATAAAAATGT GGACTGGTGC GAGN 324

SEQ ID NO:2123

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02428

SEQUENCE DESCRIPTION:

25 GATCTGAACA TTCAAAGAA AGCTTTGGAA AAAAAGAGCT GGCTGGCCTA AAAACCTAAA 60
 TATATGATGA AGATTGTAGG ACTGTCTTCC CAAGCCCCAT GTTCATGGTG GNNCNTGGT 120
 TATTTGGTTA TTTTACTCAA TTGGTTACTC TCATTTGAAA TGAGGGAGGG ACATACAGAA 180
 TAGGAACAGG TGTGTGCTCT CTAAGAGCC TTCATGCACA CCCCTGAACC ACGAGGAAAC 240
 AGTACAGTCG CTAGTCAAGT GGTTTTTAAA GTAAAGTATA TTCATAAGGT AACAGTTATT 300
 30 CTGTTGTTAT AAAACTATAC CCACTGCAAA AGTAGTAGTC AAGTGTCTAG GTCTN 355

SEQ ID NO:2124

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02429

SEQUENCE DESCRIPTION:

40 GATCTCAGAA CTGAAGGCCG CCCTGACATG AAGACTGAGC TCTTTCCAG CTCATGCCCA 60
 GGTGGAATCA TGCTGAATGA GACAGGCCAG GGTTACCAGC GCTTTCCTCT CTACAATCGC 120
 TCACCACATC CTCCGAAAA GTGTGTGGAG GAATTCAAGT CCCTGACTTC CTGCCTGGAC 180
 TCCAAGCCT NCTTATTGAC TCCTAGGGAA TCAAGAGGCC TGTGAGCTGT CCAATAACTG 240
 ACCTGTAACT TCATCTAAGT CCCAGATGG GGNACANTGG GGAGNTNGAG TTGTTGGAGG 300
 45 GAGGAAGCTT GGAGACTTCC CAGN 324

SEQ ID NO:2125

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02430

SEQUENCE DESCRIPTION:

5 GATCCATCTT CATCCATTGC ATTGGAACT NCTTTATGCT GCTGCAGTCT GCAAAGTCTA 60
 GAGCTTTTAT CAGGCCATGT CATACCCAAG AAAGCACCTA TTAAAGAAA AAACAATTCC 120
 CTGAGCTCTC AACTCCAAGT TGTAGATTG GTGTCTTCCT TGCCTTACT TAAAAAGTC 180
 ATGTGTTAAT TTTNNTCCTG CCTGTATTG TATGCAAAAT GTCCTCTATC TGCTATNAAA 240
 GAAAAGCTAC GTAAACCACT ACATTGTANC CTTCTAAGTN ATTNTTAATT AGNAGGGNAT 300
 TATNTTGCAG TACCANTTGG GAAA 324

SEQ ID NO:2126

SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS02431

SEQUENCE DESCRIPTION:

20 GATCGTGAAG ACCTGCTGAG CCAGCCTGTT CTCGGGGCCT GAATGTCTGG GGTGCTTGTG 60
 CCTTTTCTGA GAAGCGTTGT GACTGCTCAA CATCCCCATC AAGGTTTGAG TCCACAAAAG 120
 TGGACCTCCC TATCATGCTT CCCCTTCCCT CTAGCATGTG GGAAGGGACT GCTGTGAAGA 180
 ATGNCAGATG TGGGGCCTCT GCCAAGTTCT TGCATTGCTA AATAAGGGCT TCCTCTGCCT 240
 TCTACCTACA GTGCATTGTA ACTGCCTTCT GAAAGAGGTC CAGGGAGGGA TTAGGAAAT 300
 AAAGNTTCTA CCTATTGAA A 321

25 SEQ ID NO:2127

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS02432

SEQUENCE DESCRIPTION:

35 GATCCTAAGC GAAGATGGAT TTCAGTTCAT CAAATCATCA TTAATGACTT TATGTATTAT 60
 TTGCACAGGG AGAATTGAAA CTGAGTATAA TCAATAAGCT AGATACGAAA TCAGTTTCTC 120
 AAAGTGAAGT TCAGAAAGGG GCATTTTGTG CTCTTGTTTT TGCATAACTG GTTTTGTTTT 180
 TTTGCAGAAT TAACTATAAC ANTCACTGGC TACCGAAGTA AACTGATGTA CTGAATTCCA 240
 TAATACATAA CATTCAATTT TTACCACTNC TGTTTAGCGA ACTTGATATC TTATTTCTCG 300
 TTCAGNTTAA AAAAAGAAA 319

40 SEQ ID NO:2128

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS02433

SEQUENCE DESCRIPTION:

50 GATCACACCT GAAAGCAGTG GTCCCAGCTC TGTGCTGTGG GACATCACAG GTCCTAAACA 60
 GTGATAGAGA AAGGGCTGGG GAGTGGCAGC TGGAACTCTCT GCTTCCGTCT GAACATCTGG 120
 ACACACATGT CAGAGAATCT TTGCATTAAA TGGACTGCCC AATCTATTTG GTGATTAAAT 180
 GGCTGTGCGG TGAGGGGAGA ACCCTGGGCA GTCTGGAGAC TGAGGTGCCA TTCTCGGCTA 240

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GAGACACCAC CCAAAGAAGA GATGGGCTGG CTAATAAGA CAAGTNTCAG TTGAATAAAT 300
GTCTTTAAAC CTAAT 315

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SEQ ID NO:2129
SEQUENCE LENGTH:311
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02434

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SEQUENCE DESCRIPTION:
GATCATTGTC CCTACAGACA CCCAGAACAT CTTCTTCATG AGCAAAGTCA CCAATCCCAA 60
GCAAGCCTAG AGCTTGCCAT CAAGCAGTGG GGCTCTCAGT AAGGAACTTG GAATGCAAGC 120
TGGATGCCTG GGTCTCTGGG CACAGCCTGG CCCCTGTGCA CCGAGTGGCC ATGGCATGTN 180
TGGCCCTGTC TGCTTATCCT TGGAAAGTGA CAGCGATTCC CTGTGTAGCT CTCACATGCA 240
CAGGGGCCCA TGGACTCTTC AGTCTGGAGG GTCCTGGGNC TNCTGACAGN AATAAATAAT 300
TTCGTTGGAA A 311

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SEQ ID NO:2130
SEQUENCE LENGTH:309
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02435

25

SEQUENCE DESCRIPTION:
GATCCCAACT GCTCCTGCGC CGCCGGTGAC TCCTGCAAAT GCAAAGAGTG CAAATGCACC 60
TCCTGCAAGA AAAGCTGCTG CTCCTGCTGC CCTGTGGGTT GTGCCAAGTG TGCCAGGGGC 120
TGCACTCTGCA AAGGGGCGTC GGACAAGTGC AGCTGCTGCG CCTGATGCTG GGACAGCCCG 180
CTCCAGATG TAAAGAACGC GACTTCCACA AACCTGGATT TTTTATGTAC AACCCTGACC 240
GTGACCTTTT GCTATATTCC TTTTCTATG AAATAATGTG AATGATAATA AAACAGCTTT 300
GACTTGAAA 309

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SEQ ID NO:2131
SEQUENCE LENGTH:307
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02436

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SEQUENCE DESCRIPTION:
GATCCTGGCC TCGCAGTTCC TATCCCNTGA CCCAGAACAG CTCACCAAGG AGCTGCAGCA 60
GCATGTGAAG TCACTGCAGC CCATACAAGT CCCAAANAAG ATAGAGTTG TTTTGAACCT 120
GCCAAAGCTG TCACAGGGAA ATTCAACAGA CCAAACTTCG NGNCAAGGAG TGGAAGATGT 180
CCGGAAGAGC CCGTNCAGT GAGNCGTCTA GGAGCATTCA TTTGGATTCC CTCTTCTTTC 240
TCTTTCTTTT CCCTTTGGGC CTGGGCTTAC TATNATGATA TGAGTCCTTT ATGAAGACAT 300
GATGAAA 307

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SEQ ID NO:2132
SEQUENCE LENGTH:306
SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02437

SEQUENCE DESCRIPTION:

5 GATCCTGGTG GCGACCATGG AGAGGAAACT GGAGGGCAGG GATGGAGCTG AAANCTTGGC 60
 GGCCCAAGAGA GAGGTCCACC CCAAGCAGCC TGAGCCCTCA GCCACCCCCC AGCTCCCTGG 120
 CAGCTCCCCT CCACCTGCCA ATGTCAGCGC CACACTGGTG TCTGAAAGGA ATAAGGAGAA 180
 CAGGACAGAC TAACTTTTAA AATGATATGA AGAAATCAGA GGTGAAAATT GTACATTGGG 240
 10 AATATATTTA TGCAAATTTT ATTGAAATTT ATTGTAAATA AAGATTTTCT CAGTGGTCTA 300
 GANAAA 306

SEQ ID NO:2133

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02438

SEQUENCE DESCRIPTION:

20 GATCTGGGCT GGTCCCTTTC CCATAAAATN AGGTCCCTGG TTGTATGTTT CCATAGCACC 60
 CCATACTTCC TCTCTNAGAA TAATCATTTT CCTTGTAATG CTCAGCATCC GCATCCTGCT 120
 TGACTGCAAA CTGTCTGAAG GTAGGGACTG TTTGTCTTGG ACTTCGCTGC CAGTCCTTAG 180
 AACAGTGTCT GGGACACAGT GTGTTCTCAA ATATTTGTTG CTGGAATAAA TGAATGACCT 240
 25 AAATCAGTCT TTAGGGGATT TACTGTTAAC CACCATGGGA AAATTAAATA AATGCGGGGA 300
 AGGAAA 306

SEQ ID NO:2134

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02439

SEQUENCE DESCRIPTION:

35 GATCTGACCC CACAGCCTTT GGCCTGCTCA CCGACCAGC CTGGGCCGCA TTCCCTGCAG 60
 GACCTCCCGG GTCAGGCAGG GCGGCCCCCT GCTCCACACA CTGCTGCATC TTGGGTCTCA 120
 GGGACCCAGA CAGATGGACT TACATGGAGC TGGGCACTGC CCTGCCTCAA CAGGGTCCAT 180
 TGCCTCCTCG CCTCCAGAAC TTGGAGCAGG GAAGTGGGCA CCCTGAGGCC TCCAGCACCA 240
 GTTCCGTCAT TCTCGTTCCT GGGGAACCCC CACTCTGACC TGTATTAAAT GTTCACATTT 300
 40 TGAAA 305

SEQ ID NO:2135

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02441

SEQUENCE DESCRIPTION:

50 GATCAACCTG AGAAAAATTG CTGAGCTCAT GCCAGGAGCA TCAGGGGCTG AAGTGAAGGG 60
 CGTGTGCACA GAAGCTGGCA TGTATGCCCT GCGAGAACGG CGNGTCCATG TCACTCAGGA 120
 GGACTTTGAG ATGGCAGTAG CCANGTCAT GCAGAAGGNC AGTGAGAAAA ACATGTCCAT 180

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EP 0 679 716 A1

CAAGCANTTA TGGANGTGAG TGGACAGCCT TTGTGTGTAT CTCTCCAATA CAGCTCTGTG 240
GGCCAAGTAA A 251

5 SEQ ID NO:2136
SEQUENCE LENGTH:301
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
10 CLONE:HUMGS02442
SEQUENCE DESCRIPTION:
GATCTGCATC CCCAAAAGTA TCACTCCTTC TCGAATCCTT CAGAACATCA AGGTGTTTGA 60
CTTCACCTTT AGCCCAGAAG AGATGAAGCA GCTAAATGCC CTGAACAAAA ATTGGAGATA 120
TATTGTGCCT ATGCTTACGG TGGATGGGAA GAGAGTCCCA AGGGATGCAG GGCATCCTCT 180
15 GTACCCCTTT AATGACCCGT ACTGAGACCA CAGCTTCTTG GCCTCCCTTC CAGCTCTGCA 240
GCTAATGAGG TCCTGCCACA ACGGAAAGAG GNAGTTAATA ANNGCCATTG GANGCATNAA 300
A 301

20 SEQ ID NO:2137
SEQUENCE LENGTH:302
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02443
25 SEQUENCE DESCRIPTION:
GATCCGAGAG GGCATGGCCG CCCTGCAGTC TGACCCCTGG CAGCAAGAGC TCTACCGCAA 60
CTTCAAAAAGC ATCTCCAAGG CTTTGGTGGA GCGGGGTGGT GTGGTCACCA GCAACCCACT 120
TGGCTTCTGA ATACTCCCGG CCAGGGCCTG TCCCAGTTAT GTGCCTTCCC TCAAGCCAAA 180
GCCGAAGCCC CTTTCCTTAA GGCCCTGGTT TGTCCCGAAG GGCCCTAGTG TTCCAGCAC 240
30 TGTGCCTGCT CTCAAGAGCA CTTACTGCCT CGNAAATAAT AAAAATTCT AGCCAGGTCA 300
AA 302

35 SEQ ID NO:2138
SEQUENCE LENGTH:297
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02444
40 SEQUENCE DESCRIPTION:
GATCATCCAG AAGGAGCCCG TTGAAGTGGC CCCAAGCCAG CTCTCTGCAT TTCGTACTCT 60
CCTGTTTTCT GCACTTGGTG AAGAGGAGAA GATGATGGTG AACAACTATC GCCCACTTCA 120
ACCCTTGATG AACCGGAAGG TCTGGGCGTC CTTCCAGGCC ACTAATGAGG GCACAAGGTC 180
CTAGAGACAT TAGGTCCACA TGAATAGCAG AACTGACTTT GAAGGAAGGA AGCGTTGTTT 240
45 CCCAAGTTTC ACAATGTGAT TGTACATGAC TTCTGAAATT AAAAAGAGAG CATGAAA 297

50 SEQ ID NO:2139
SEQUENCE LENGTH:295
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02445

SEQUENCE DESCRIPTION:

GATCTATGCC AGCAAAACAT CATTITGAGA CAAACATTTT TGTGGCAGAT GTTTTCCTA 60
 AAAAGTACTA TATCATCCAA GAAATATTTG AGTAAATCC CTGTCTTT TGGGTGACAT 120
 TAACTGACAT TTGCTTTTTT TCAAGACCTA ATAGAAAATA AGAAAGCCCA TAATGTATTT 180
 AGAAACAGGA ATCCTCAGAG CAATTCTCTG TATTCTCATA TAATTCAAT GTAAACAGA 240
 AAACATATTG ATGTGTTGGT GATAGGCTTG AATTATTA AACTTCAAAA ACAA 295

SEQ ID NO:2140

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02446

SEQUENCE DESCRIPTION:

GATCGAGGCT GCAGGATATG CTCAGACTCT AGAGGCGTGG ACCAAGGGGC ATGGAGCTTC 60
 ACTCCTTGCT GGCCAGGGAG TTGGGGACTC AGAGGGACCA CTGGGGCCA GCCAGACTGG 120
 CCTCAATGGC GGACTCAGTC ACATTGACTG ACGGGGACCA GGGCTTGTTC GGTTCGAGAG 180
 CGCCCTCATG GTGCTGGTNC TGTGTGTGT AGGTCCCTG GGGACACAAG CAGGCGCCAA 240
 TGGTATCTGG GCGGANTCAC AGAGTTCTTG GAATAAAGC AACCTCAGAN CAAA 294

SEQ ID NO:2141

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02447

SEQUENCE DESCRIPTION:

GATCTGGTTG GTGGATGAAC AAGTGTCAG CTGGACATCT CAATGGNGTT TATTACCAAG 60
 GTGGCACTTA CTCANANGCA TCTACTCCTA ATGGTTATGA TAATGGCATT ATTTGGGCCA 120
 CTTGGANAAC CCGGTGGTAT TCCATGAAGA ANCCACTATG AAGATAATCC CATCAACAGA 180
 CTCACAATTG GAGATGACAG CAACACCACC TGGGGGGAGC ANACAGGTGG AGACGTAAA 240
 NGCCGTTCAN TGNGTTTCT NTTAAAGNC TTTATCTGAC CNGGGGTANN GN 292

SEQ ID NO:2142

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02448

SEQUENCE DESCRIPTION:

GATCGGAAAA AAATCTTGA ACGCAAAGCC AAGTCTGAC AAGTTGGAAA AGAGAAAGGC 60
 AAATATAAG AAGAACTTAT TGAGAAAATG CAGGAATAA TAGAACCTGT TGTGCAACCA 120
 CGGTTTAACC GGAGATTTG AGGCTAGGT GTGTTCTTT CGAACTTTC GGAATGTCTG 180
 GAACATTTCA TTTCTGTTT TGITACCTGT GCCTCTGTA ATCTACTTT GCAATTTAA 240
 GTAATAATTT TATGAATAAN AATGGGAAAT GCTTCCTAAA 280

SEQ ID NO:2143

EP 0 679 716 A1

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02449

SEQUENCE DESCRIPTION:

GATCCCATAA CAGGCTACCC CTTGGCCTCA TGCTGGAGTT GTGTGTGTCT GTCTTCATCC 60
CAGGCTGAGC TCCTTGAGGT GAGGATGTTG TGCTGTTTGC CTCCTCACA GTGCCTTGGT 120
CTTAGTGGAT GCCCAGTTGT CTTGTGAATG ACTTTTAAGA AGTGTACTTA AGAGAAAAAT 180
CCTACCNAT NNNNNGTAAT TACAAGTCAT GTTTTGTNG CTTAAAGGTG ATAAATCAGT 240
GTATATNATN NGNTAATGTC CATTAAAGCC AGTTTTTAAA 280

SEQ ID NO:2144

SEQUENCE LENGTH:278

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02450

SEQUENCE DESCRIPTION:

GATCCTAGAG CCTGACGTTT AGTGAACCCA TGTTTCTGGG TGGGTGAAAG GGGCCCAACC 60
CTGCCACTT CAGCCAGCC CGCCCAAGGG GACTTGTGCC AGCAGAACAT GTNGGAGGAA 120
GAAGCCCGT TTCCAGGCA TCCGCAGCCC AGGGTAGGGA GAAATATTCT CTCCACTTTG 180
GGGAGAGTT CTTGCTCTCG ACCTAGTGGT TTCTACTCTC ACCGACTTAT TCTGATTTC 240
GAAATAAAAT GAAATGTCTT ATTTTGGGA AAGTAAA 278

SEQ ID NO:2145

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02452

SEQUENCE DESCRIPTION:

GATCCCACTG GGGCCTNTGG GAAGNGACA GACTTATNAC TAGATGATTC GCTGGTGTCC 60
ATCTTTGGA ATCGACGTCT CAAAAGGTTA TCCATGGTGG TACAGGATGG CATAGTGAAG 120
GCCCTGAATG TGAACCAGA TGGCACAGGC CTCACCTGCA GCCTGGCACC CAATATCATC 180
TCACAGNTCT GAGGCCCTGG GCCAGATTAC TTCCTCCACC NNTCCNTATC TNACCTGCCC 240
AGCCCTGTGC TGGGGCCCTG CAATTGGAAT GTTGGCCAGA TTTCTGCAAT AAACACTTGT 300
GGTTTGC GGG TCAA 315

SEQ ID NO:2146

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02453

SEQUENCE DESCRIPTION:

GATCCCAGGA CCATTTGGCT AGTGTGCCTA GGTGACCACA TGATTGCTGT TTTACCAGGA 60
ATGCAGCATC CCATTGACAA AACAAGTGT CTGAGAAGGT TAAAAATACT ACAGNGAATA 120
TGGGANCACA GNCCTTGAAA TTAGCTGAG TTGTAACAGC TGAAGTCCA AGAGGTGTCT 180

TCCTTGTTTN GAGGTGNACT AGTGTGCTT CCAGAGGGCA GCTTGAAACC CGTAAAGCCT 240
GTTTTGGGGA ATCCTTTTTT GNCTTGCTTT GNTTN 275

5 SEQ ID NO:2147
SEQUENCE LENGTH:274
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
10 CLONE:HUMGS02454
SEQUENCE DESCRIPTION:
GATCATCAAT GATTTATTGG CACGTTCTAT TGGGATGGTC GAAGTTAATA CAGTAGACAA 60
ATACCAAGAT AAGGGACAAA AGTATTGTCC TAGTATCTTT TGTTAGAAAT AATAAGGATG 120
GAACTGTTGG TGAACCTTG AAAGATTGGC GACGTCTTAA TGTGCTATA ACCAGAGCCA 180
15 AACATAAACT GATTCTTCTG GGGTGTGTGC CCTCACTAAA TTGCTATCCT CCTTTGGAGA 240
AGCTGCTTAA TCATTAAAC TCAGAAAAAT TAAA 274

20 SEQ ID NO:2148
SEQUENCE LENGTH:266
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02455
SEQUENCE DESCRIPTION:
25 GATCGCAGAG AAGGCAGCTG ACATTATCAA GGGGCAGCCT GCACTCTGGG ACAAAGATGT 60
CCCTGTCTAC AAGCCCAGGA CGCTGGCCAC CCAGCGCTAA GACAGTTGCT GCTGGAGGAT 120
GACCAGGGAA GCCCCTGAT AAGCCAAGAG GGCCAGCACA GCCCTTGCTC CCAGGCTCCT 180
GCCTGAAACT ATCTAGCACA CTAGGACCCA GGTGGTACCC TACTCAGTGG CTGAGAATTG 240
30 GATAAAGTCT TGGGAAATGA GACAAA 266

SEQ ID NO:2149
SEQUENCE LENGTH:265
SEQUENCE TYPE:nucleic acid
35 TOPOLOGY:linear
CLONE:HUMGS02456
SEQUENCE DESCRIPTION:
GATCTTTAAC AAATGTTTTA AGCAATTTTA AAAAGGCAGG ATGTTATTGA CATTATACAC 60
40 TGAAGTCTTA ACATTTTAAC ATTTATAGTG CTTATTTGCA AAATTGTATA ATTAGGAATT 120
ATTTAGAGA CAATGTTTTT TTTTCAGGT GAGTAGTTGC CGCGTAATAT CATTGGAGTA 180
CATTCTTTAT ACTGTTTGTG AAATTAATAC TAGCATATTA AGTGACAAA TAGATTTAGA 240
AAACAATAAA AAATTGCATG CTAAA 265

45 SEQ ID NO:2150
SEQUENCE LENGTH:264
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
50 CLONE:HUMGS02457
SEQUENCE DESCRIPTION:

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5 GATCCTAGTG TTTTAATTAC CTGTGTGCAG CTATTTTAAA TAGCATTTTA CTTGAATAAT 60
 ATGTATGTTG TCATTGTTTC ATGCTATACT TTGTGGGATA AAAGTTGGGA ATGAGTGTGG 120
 TAAGAAATTT ATAAAGTTT GCTTTTAAA CGTGGACATA ACTCATTTT CTAGTTTTTG 180
 ACAATTGTGT GTTTTAGTGT CTAGTCTGCA GAGAGCTGTG TGATTAATAA ACGTGGAATT 240
 AACAGAATTT CCTCTCCCTG TAAA 264

10 SEQ ID NO:2151
 SEQUENCE LENGTH:259
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02458
 SEQUENCE DESCRIPTION:
 15 GATCCTGGGC TCATAGGCAG TCCCTTTCAC TTCCTTGTCT TGCTCCCTGC TATGCTGGAG 60
 ATGAATGTGA CTAAGAGGGC CATCTTGCTG GCTTAATGTG TGGCTGGAGA GACCAGCCTG 120
 GAGACAATGT GGCAGAAATGG GGCCTTCAT CCAGTCTGTC TAAGCCCTGT CGACTTGGGG 180
 AGGTGATTC TTTCTGGTT CTATATGTNA AGCAAAATAA ATGTTTAAA ATTAAAGCA 240
 NNAAGCAGA ATGTGAGTN 259

20 SEQ ID NO:2152
 SEQUENCE LENGTH:255
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS02459
 SEQUENCE DESCRIPTION:
 GATCAAAGCT GGAAGTGGAA TTGTATCGTG TAATTATTTT TGTGTTCTTA ATGTTATTTG 60
 GTACTCAAGT TGTAATAAC GTCTACTACT GTTTATNCCA GTGTCTACTA CCTCAGGTGT 120
 30 CCTATAGATT TTCCTTCTAC CAAAGTTCAC TTTCACANTG AAATTATATT TGCTGTGTGA 180
 CTATGATTCC TAAGATTCC AGGGCTTAAG GGCTAACTTC TATTAGCACC TACTGTGTGA 240
 AGCAATGTT ACAA 255

35 SEQ ID NO:2153
 SEQUENCE LENGTH:248
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 40 CLONE:HUMGS02461
 SEQUENCE DESCRIPTION:
 GATCTGTGCA GCAAAGCACC ATGGTACATG TNNTACCTAT GTAACAAACC TGCACATCCT 60
 GCACATGTAC CCTGGAACCT AATAAAGTT GGAAATTTT AAAAGAATG AATAAGACCT 120
 GGTATTTGAT AGCACAACAG GGAGACTATA GTCAACAGCA ATTTAATTGT ATATTTTAAT 180
 45 ATGACTAAAA GAGTATAATG GNTTGTGTTG AACACAANTA AATGCTTGAG GGGATGGNCA 240
 CCCCNA 248

50 SEQ ID NO:2154
 SEQUENCE LENGTH:245
 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS02462

SEQUENCE DESCRIPTION:

5 GATCTTAAGC TTTGATAAGA GCTGTCCTGT GGCTGAGTAT GGTGTGTATG TNAAGGTGCT 60
 TCCATCCAGG CTGGGTTTCAG AAGCCATAGC TGNGACTAAT GCAAGCTGGC CGAAGCCTTG 120
 CTGAAAGAAG CTTTAGCTGG AGAGGCAAAG TGGCGGGAGT GGCAGGAGTG GATNNGATAA 180
 GATGTGGTTT AAGTNATGGG TNCAGCCTGA TTCTGAGCAA TAATAAAGAN TTTCTTTTGC 240
 CCAAA 245

SEQ ID NO:2155

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS02463

SEQUENCE DESCRIPTION:

20 GATCCAGGAA GCTCCCAAAC CAGAGTGTGA GAAGGCACTT CTTGCCTTTC AGGAGAGTAA 60
 GAACCTCTGC GAANCATGGA GAACTTTATG CAACAATTAA AGGAAAGTGG CATGACAATG 120
 GAGGAGCTAA AATATTCTCT GGAGCTGAAG AAAGCTGAGT TGAAGGCAAA ATTGTTGTAA 180
 CACTACAGCT GAGCAGATGT AATAGAAATA AACCTATGAA TAAATTTNCT TCTTGGTTCT 240
 GAAA 244

25 SEQ ID NO:2156

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02464

30 SEQUENCE DESCRIPTION:

GATCCTATAT CTTGGTNAAT ATGCTCCAG ATACTTTAAA CATGGCAACC TTTTGGCCTA 60
 AGAGAATGTT TGTCATGGA AAAAAGCTTT TGAGATGAGA GGGTGTCTTA CTTTCTTGTC 120
 GCAATTGATT TTCTGTTTAA ACACCTTTG GGTAAATCT TGCAAAGAGC TTTTATAATT 180
 35 NGTTTTACTG AATTGTATGG AGATTGTATA CCAAGTAAAG CTCITTTTAAA TTACAAA 237

SEQ ID NO:2157

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS02465

SEQUENCE DESCRIPTION:

45 GATCCACGCT GGGCCGAGGA TGGGACGTTT TTCTTCTTGG GCCCGGTCCA CAGGTCCANT 60
 GACACCCTCC CTCCAGGTC CTCTCTTCCA CAGTGGCGGG CCCACTCAGC CCCGAGACCA 120
 CCCAACCTCA CCTCCTGAC CCCCATGTAA ATATTGTTCT GCTGTCTGGG ACTCCTGTCT 180
 AGGTGCCCCT GATGATGGGA TGCNCTTTAA ATAATAAAGA TGGTTTTGAT TAAA 234

50 SEQ ID NO:2158

SEQUENCE LENGTH:233

55

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02466

SEQUENCE DESCRIPTION:

GATCCCTAAG CTGTAGAACA TTTAACGTT GATGCCACAA CGCAGATTGA TGCCTTGTAG 60
ATGGAGCTTG CAGATGGAGC CCCGTGACCT CTCACCTACC CACCTGTTTG CCTGCCTTCT 120
TGTGCGTTTC TCGGAGAACT TCTTAGCCTG ATGAAATAAC TTGGGGCGTT GAAGAGCTGT 180
TTAATTTTAA ATGCCTTAGA CTGGGGATAT ATTAGAGGAA GCAGATTGTC AAA 233

SEQ ID NO:2159

SEQUENCE LENGTH:229

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02467

SEQUENCE DESCRIPTION:

GATCTGTGCA CACTTTCTAA ACAGCTTGTN ATGCAAGTNT GAGCCTATTG TGTACTTGA 60
CCTTATTTTG GAAGTTTGA ATTGGCCTAG GAGGAAACCC AGAAATGAAC CAGGGGTATG 120
TNATCACTTT TTNATATCA AGTCCTCACC CTCCTNCCAC ATAATGCTCT ATCCGGCTAA 180
GGTTGGAAC CTGAAGTTGG AGAAGGTGGA ATAAAGTTAC ACCTGGAAA 229

SEQ ID NO:2160

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02468

SEQUENCE DESCRIPTION:

GATCCCTGCG AATTACGAAA ACTACTACAT CCATGATTGC CCCAACCCCTT TTGGGGTGGG 60
GCAGAAGGTG AAGCATCCA ACTGACTAGA GACTCAGGCC CTGCAGGNCC TTATAGAACC 120
TGTGGCCATC CCTGAGCACC CTGCCACCAG GTGACCTCGG CCATACTCAC TGCCCCCCTT 180
GGGCACCCAC TCACCNTAGA ATAACTTAA CAGTGTCCCG TGGTAAA 227

SEQ ID NO:2161

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02469

SEQUENCE DESCRIPTION:

GATCTTACGA TGCCCTCTGT ACTGACCTGA AGGAGACCTA AGAGTCCTTT CCCTTTTGA 60
GTTTGAATCA TAGCCTTGAT GTGGTCTCTT GTTTTATGTC CTTGTTCTTA ATGTAAAAGT 120
GCTTAACTGC TTCTTGGTTG TATTGGGTAG CATTGGGATA AGATTTTAA TGGGTATTCT 180
TGAATTGCTT TTACAAATAA CCAATTTTAT AATCTTTAAA TTTAAA 226

SEQ ID NO:2162

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS02471

SEQUENCE DESCRIPTION:

5 GATCTGCCTT GCTCACTATT TGCCTATTGG CATATATGAT TACTTTGCTA AAAGACATT 60
TGGCCAAGAC AAGCCCATNT CCAGAGCTCT AAGAATGCCT AACTACAAGA AAAAGGCCAC 120
CTAGGCAATG GAAGCCCTCA AAGAAGTCGG AATGTCATAG TCTTGAAATG AAAGGGAAC 180
TGGGAACTG GGTTCCTCAT TAAAGTTGTT TCCCACTCTN TAAA 224

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SEQ ID NO:2163

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02472

SEQUENCE DESCRIPTION:

20 GATCTAATTT GATAACAAC ATGGCTTGTG TGAAACTGA GCAGGTGTTT GTTTACCCAT 60
AGTGTCTGT GTAGTTATTG CTTANTCTGC AGAAATAAT GACTTAGATG AGATGTCTGA 120
CTTGCTTTCA CTTATTAAC ATGTTACCA TGGGATGATG TCTGTAACAT CAGATATTGT 180
TCAACTAGAC TAGGATTAA TAAAAATTGT GAAAGCTTAA A 221

SEQ ID NO:2164

SEQUENCE LENGTH:210

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02473

SEQUENCE DESCRIPTION:

30 GATCTTAATT TACAGTTCCA TGGGATTAAA ACAAGTTTGC ATTTATGTAA TTTGCATTAC 60
TTTAAAAATT ACAACAACAT AATCTCTGAA ACTTACTTCA ATCAATTCAC ATCCCTACAA 120
CTGTTAAGAT TTATTTTGTG ATTAGNATCT TATAGTGGGT ATTCTTTTNA GTGCTGATAT 180
TTCTATTCAT TAAATCCTG TGNACACAAA 210

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SEQ ID NO:2165

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02474

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SEQUENCE DESCRIPTION:

45 GATCCTGCAT TAAATTTTAA TTTGTGAAAA TTTGAAAATT ATGAGCTATA ACTTATAAAG 60
TTTGCTTCT TATGNCTAAA ATCTTTTAAA GGATTATTG CATTTATGTA AACTGGAAA 120
TGAAGTTATA TATGAGTGCA AAGAAATTGA CTTCTGCTCA AATATGTGTT GATACCCTAC 180
AGTAAATTGA ATTAAATTTT TATCCCAA 209

SEQ ID NO:2166

SEQUENCE LENGTH:203

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02475

SEQUENCE DESCRIPTION:

GATCAGTCAA TTTTCCGTCG TCCGTAACCA GCGGGCCCCT GGTCAAGTNC TGGCTCTGCT 60
 5 GTCCCTTGCT TCCATTTCCC CTCTGCACCC AGAACAGTGG TGGCAACATT CATTGCCAAG 120
 GGCCCAAAGA AAGAGCTACC TGGACCTTTT GTTTCTGTT TGACAACATG TTTAATAAAT 180
 AAAAATGTCT TGATATCAGT AAA 203

SEQ ID NO:2167

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02476

SEQUENCE DESCRIPTION:

GATCTGGACT TCGAACTTT CCTCATGGAT TCTGAATAAA AGAAACACTC TACACCTCTT 60
 15 AAATCAAGGT CATGTAGATA ATGACTTTGT TATAAATGCT ACAGCTGTGA GAGCTTGTTT 120
 CTGATTTTCT TGTTCGCTTC TGTAATTCTG AAAAAGTTTA AACTGGTAGA ACTTGAATA 180
 AATAATTNGT TTTAATTAAA 200

SEQ ID NO:2168

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02477

SEQUENCE DESCRIPTION:

GATCTTAAGT GTCTCCTTGC TCTGGTAAAA GATAGATTG TAGCTCACTT GATGATGGTG 60
 30 CTGGTGAATT GCTCTGCTCT GTCTGAGATT TTTAAAAATC AGCTTAATGA GAGTAATCTG 120
 CAGACAATTG ATAATAACAT TTTGAAAAAT GGAAAGATGG TATACTGTTT TTAGAGGAAT 180
 AAACGTATTT GTGGTTTAAA 200

SEQ ID NO:2169

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02478

SEQUENCE DESCRIPTION:

GATCCAAATC CCAGCTCTAC TGTCTCGTCC GAATTAGCCT TGGGAAAATC ATTTATATGC 60
 40 TAAATAATTT ACCTTTTAT CTAGGAGATG AAAAGAGGAT AATGTTTCCT TCCATAAAGA 120
 AAGTTCTTGT AAGAATCAAA AGAAATGGTG AGCTTTAAGT GGTGTTGAAA CCATAAAACA 180
 CATCATAAAA GTTCAAA 197

SEQ ID NO:2170

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02479

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCCATGNC ATCTCTCTCT TGCCTGAGGG GAAAGAGAGA TGGGCCAGGC AGAGAACAGA 60
 ACTGGAGGCA GTCCATCTAG GGAANNNNAC TGTGAGGCCA TACTTGTGAA ACGTCTGGAC 120
 TGCTATTCTA GAGCTTTTAT TTGNGTGTGT TCGTTGCACA NCTTGTTTAA AATGTTTAAT 180
 AAAAGCTTTA TAAACTTTAA A 201

SEQ ID NO:2171

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02480

SEQUENCE DESCRIPTION:

GATCCCCCAA GTACAGGCGC TAATNTTGT GATAATTTGT AATNGTGACT TGTACTCCCC 60
 GGCTGGCAGC GTAGTGGGCG TGCCAGGCC CAGCTTTGTT CCCTGGTCCC CCTGAAGCCT 120
 GCAAACGTTG TCATTGGCAG GGAAGGGTGG GGGGCAGCTG CGGTGGGGNG CTATAAAANT 180
 GACAATTTAA CGNGACANTN GTNTTTTATT TCCTNAAA 218

SEQ ID NO:2172

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02481

SEQUENCE DESCRIPTION:

GATCCTTGCA GGGAGCTTGG AACCTTAGTG CACCTACTTC AGTTCAGAAC ACTTAGCACC 60
 CCACTGACTC CACTGACAAT TGAATAAAG ATGCAGGTGC TCGTATCTCG ACATTCATTG 120
 CCACCCCNCT CTTATTTAAA TAGCTACCAA AGTACTTCTT TTTTAATAAA AAAATAAAGA 180
 TTTTATTAG GTAAA 195

SEQ ID NO:2173

SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02482

SEQUENCE DESCRIPTION:

GATCCGGCAA CATCAACCCG AGTCATTGCT TCTGTGGAGG GACAAGTGA CTCAGGGCAG 60
 CGCAGGCTGA CCACAGCACA GCCAACACGC ACCTGCCTCA GGACTGCGAC GAAACCGGTG 120
 GGGCTGGTTC TGTAATTGTG TGTGATGTGA AGCCAATTCA GACAGGCAAA TAAAAGTGAC 180
 CTTTACACT GAAA 194

SEQ ID NO:2174

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02483

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

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GATCAAATGG AAAGGAGAGG AAAGAAGTCA GTGCTGCCTA TTAGTAGTTA ATTCTGTCAC 60
 TCACCACTAC ATCACTTGAG ACAAATCTAT GCCACTCAGA ATCTCCTTCT TTCCTGGACT 120
 TAACTCTAAT TCTAGAGTCT CTGTTACTGC TTGGGCTATA CCTGGGCATA CTAATAAAGT 180
 ATGGTATTGA AA 192

SEQ ID NO:2175

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02484

SEQUENCE DESCRIPTION:

GATCAGAACT GTTACCAAAA AACAACTGTC AGTTTTATTG AGATGGGAAA AATGTAAACT 60
 CGANNNTTAT TACTTAAGAC TTTATGGGAG AGATTAGACA CTGGAGGTTT TTAACAGAAC 120
 GTGTATTAT TAATGTTCAA AACACTGGAA TTACAAATGA GAAGAGTCTA CAATAAATTA 180
 AGATTTTGA AA 192

SEQ ID NO:2176

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02486

SEQUENCE DESCRIPTION:

GATCGTCTTG GAAGGGAGTG GTTTTCAGAG ACATTTTCTA AAGTGAAGGA GAAACTCAAG 60
 ATTGACTCAT GAGGACCTGA AGGGTGACAT CCCAGGAGGG GCCTCTGAAA TTTCCACAC 120
 CCCAGCGCCT GTNCTGAGGA CTCCTCCAT GTGCCCCAG GTGCCACCAA TAAAAATCCT 180
 ACAGAAA 187

SEQ ID NO:2177

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02487

SEQUENCE DESCRIPTION:

GATCATTGAA ATGCTGAAAA TTTTAACAGT CTTCTTAAAA GTATTGAGGG GGCAAAAATT 60
 ACCAATTATG GTATACAAAA ATAAGCCTAT AAATGTNTT CACATTGCTA ACTTGAGTTT 120
 CAGTTGATTC AGTTTGAAT AACTAGTAAT GAGCTTCTGT TTACAATAAA AATNCTGTAA 180
 ATTGAAA 187

SEQ ID NO:2178

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02488

SEQUENCE DESCRIPTION:

GATCAGTTGC TTATAGATAA TGTTCATGA CCTCAAGACA TATATTTTGG AGAAATTATC 60

ATTTTAAAAA ATTTGGTCTA TACTGATTGT TTTCAGTATG TCCAATATTA TTACTTATAA 120
 CACTGACCTC TGGAAAATAT TTTGTNCACA AGAAATAATA AAGTATAATG ATTTGTNGCA 180
 NNNAAA 186

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SEQ ID NO:2179
 SEQUENCE LENGTH:179
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02489

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SEQUENCE DESCRIPTION:
 GATCCACAAG GCCTGAGGAG CAGTGTGGGG GGACAGACAG GAGGTGGATT TGGAGACCGA 60
 AGACTGGGAT GCCTGTCTTG AGTAGACTTG GACCCAAAAA ATCATCTCAC CTTGAGCCCA 120
 CCCCCACCNC NTTGTCTAAT CTGTAGAAGC TAATAAATAA TCATCCNTNC TTGCCTAAA 179

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SEQ ID NO:2180
 SEQUENCE LENGTH:179
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02490

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SEQUENCE DESCRIPTION:
 GATCCAATGG AGCCTGGNGA GGTGTGCCCC GAAAGCTTGT CTGTAGCGGG TTTTNTGAGA 60
 GTNAACACTT TCCACTTTTT GACACCTTAT CCTGATGTAT GGTTCAGGA TTTGGATTTT 120
 AATTTTCCAA ATGTAGCTTG AAATTTCAT AAACCTTGCT CTGTTTTTCT AAAAATAAA 179

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SEQ ID NO:2181
 SEQUENCE LENGTH:177
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02491

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SEQUENCE DESCRIPTION:
 GATCTGTCCA CTCCTGGTCA TTGGTGGATG TTAAACCCAT ATTCCTTTCA ACTGCTGCCT 60
 GCTAGGGAAA ACTGCTCCTC ATTATCATCA CTATTATTGC TCACCACTGT ATCCCCTCTA 120
 CTGGGCAAGT GCTTGTCAG TTCTAGTTGT TCAATAAATT TGTTAATAAT GCTGAAA 177

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SEQ ID NO:2182
 SEQUENCE LENGTH:176
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02493

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SEQUENCE DESCRIPTION:
 GATCAAAAAA CCACAGGGCT TTTGGGCACT GCCTCCTTGG GAAGTTAGTG GCCACAGAAG 60
 AGAGATGAAA CCTGTAAGAA GTCTGGAGTC TTTTGGAATC TCAGCCATTT CCCCAGGTTG 120
 TTACTTTCTT AGTATGTACA GTCTTCTCAG GATGAGCAGT AAAACCTTTG AACAAA 176

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SEQ ID NO:2183

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SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02494

SEQUENCE DESCRIPTION:

GATCCTAAAC TCTCTAGCTT AAGTGTAAT GAAGTACAGT AGTTTCCCTA CTGAACCCTA 60
CCTCTTGTGT CCCTGGAACC TTCTAGAACA CCTGCCTTCT ACCCTCTGGT TGGGAGATGC 120
AGCCACCACA TCCCTTCATA TCATACTGTT TTGAATAAAT TTTCAAATCC TTAAA 175

SEQ ID NO:2184

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02495

SEQUENCE DESCRIPTION:

GATCCGGAGG GCCCAGGAGA ACCGGAGCGT GCTTCAGGGT GCCCGCAGAA CAGGAGCTGC 60
TCAGCCAAGA ACTGTGGCGG CGGCTGCTGC CAGGATGCCG AAGATACCCC ACTAGCACCC 120
CTNAGGGGGT CATGTGGTCA ATAAAAGTCC TTAGCTGCTG CCTAAA 166

SEQ ID NO:2185

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02496

SEQUENCE DESCRIPTION:

GATCAAAATC AAGAAATCCG GGCATCACAG AGAAGTTGGG TTTAGGACAG CAGGTGCTGT 60
TCCGAGACTC AGTCCTAAAG GGTITTTTTT CCCACTAAGC AAGGGGCCCT GACCTCGGGA 120
TGAGATAACA AATTGTAATA AAGTAACTTC TCTTTTCTTC TAAA 164

SEQ ID NO:2186

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02497

SEQUENCE DESCRIPTION:

GATCAGCCCC TTAATAATNAG TTCTAGAGCA GGTCTTCTGT TCCAGAAGGG GAGAAGCATA 60
GAGGGCCTGT GAGCTCACGT GTGTTCTTTG TCATAGGGGT GAAAACTAA CTTCAAGTGT 120
CCCTTGTTTG AAATAAACTT AGCAGAGTCA CTTTCTATCT TAAA 164

SEQ ID NO:2187

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02498

SEQUENCE DESCRIPTION:

GATCTAATGG TTTTATAAAT NAAAGTTCCC CTGGACAAGT TCTCTTGCCT GCCACCATGT 60
AAGATGTACC TTGCTACTC ATTCACCTTC TGTGATGATG GTGAGGCCTT CCCAGCAATG 120
TGGAACGTG AGTCCATTAA ACCTCTTTCC TTTATAAATT AAA 163

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SEQ ID NO:2188
SEQUENCE LENGTH:162
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02499

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SEQUENCE DESCRIPTION:
GATCCTAACC AGGTAACCTG GTCCTNTGAA TTGAAGCTTA TCATATACCC AAAGCCTTGA 60
CTAGAAATAC CTAAATAGAA TACCATGGTC ATTGGAAGAA ATAGATAGTN TTNTAAAGTA 120
TTATTTNAAT AAATCCTAAA GTNTGTCTNT CTTCTCCTCA AA 162

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SEQ ID NO:2189
SEQUENCE LENGTH:154
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02500

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SEQUENCE DESCRIPTION:
GATCCTGGCC ATGAATGAAA AGGATAAGAA GAAAGAGAAG AAATGAAGTG ACCATCCAGC 60
CTTTCCAAT NAGACTTCCT CTCCTCCAC CCCTCATTTT CTTTTTGCAC ACATTACAGG 120
TGGTGTGTTT TGTGATAATG AAAAGCATCA GAAA 154

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SEQ ID NO:2190
SEQUENCE LENGTH:154
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02501

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SEQUENCE DESCRIPTION:
GATCAAAGCC AGCNACCCCC ACCCCAACAC ACTCGGTGTC CCANTCATAC TAGGGCCTGT 60
GTAAATCCCA GCCTGGCCAT ACCCTCAACC TCAGTGGGCT GGAAATNACA GTGGGCCCTA 120
TAGCAGTGGC AGAATAAACT CAGNTGTGTT CAAA 154

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SEQ ID NO:2191
SEQUENCE LENGTH:153
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02502

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SEQUENCE DESCRIPTION:
GATCGCCCCA CTGCAATCCA GCCTGGGAGA CATAATTCAA ATCTATTTTG GTCTTATATC 60
TTCTTATGTT TGTGTTATTT CATGTGTGCC AGTTTCTCTT TTTTTCACAA CAATTATCA 120
ATTTGTGGCA ATAAAAATNA TTTACCTTTT AAA 153

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SEQ ID NO:2192

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SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02503

SEQUENCE DESCRIPTION:

GATCATGGTG ATTTTACTGC TGCTTGTGGC TATCGTGGTT GTTGCACTCT GGCCGACCAC 60
CAGCAGTNAC ACCTGCCAAT NACAGATGCA AGCCCAACAC CCTTTTGGTA CGCAAAACCT 120
GCTCTCAATA AATCCCCCA AAGCTCTGAA A 151

SEQ ID NO:2193

SEQUENCE LENGTH:371

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02504

SEQUENCE DESCRIPTION:

GATCCCAGGA ACCTTCCTNC TCCAGGGCAG CACAGGACTC AGCCATGTNT GGACCGGCCC 60
TGCTGAGGCT ACAGTCACTC TGGAAGCTCT GCGCTTCATC AGGNGGCAGG ACTGTGGCGG 120
GAGGGGTCTT TGAAGATGGG TGTGGGGAGC AGTGGGTGAG GAAGTGGGAG CCAGAGGTTT 180
GACTCACTTT GCTTTATTTT TCAGGCTACA ATACAGGTCA GAGACAATGG CTTATAAAGG 240
TTTAGTGTGG TCTCAGGATG TGACAGGCAG TCCAGCCTGA CCTTCTGCA CACTCCAGAC 300
AAACTTCCCA GACAAGCTCC TTTGTGCCCTC TACGTGGAGA GGGTGTGGGA AAGTTATCAC 360
ATTAAAAGGT N 371

SEQ ID NO:2194

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02505

SEQUENCE DESCRIPTION:

GATCAAGAAA GAGATGGAGG AGGAGGACTG AGCCCAGAAT TCACTAGGTT CGAATCCAGA 60
NAGCAGTGTG GAAAAAAAAA ACCAAAAANC AACTGNCCAG TTGTTGATAA CCACTAAGAG 120
TCTCTATTAA AATTACTGAT GCAGAAA 147

SEQ ID NO:2195

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02506

SEQUENCE DESCRIPTION:

GATCTGTGTC ATTNCCCATG AGGGGCCGGG GCAGGTGGCT GGGTGGGGGC ACAGGCTGGA 60
GTATTCTNAG TTCTACTGGT TCTACACTGT GAGGTGGCAA TGGGATTGTC TCAGATGCCA 120
CCCAATAAAA TGCCTGTAAC TTAAA 145

SEQ ID NO:2196

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02507

SEQUENCE DESCRIPTION:

GATCGCTACT CTTAAGAATA TACATGTATG TATTCATAGG AACATTTTT CTCAATATTT 60
GTATGATTCTG CTTACTGTTA TTGTGCTGAG TGAGCTCCTG TGTGCTTCAG AAAAAAATAA 120
ATGAGACTTT GTGTTTACGT TAAA 144

SEQ ID NO:2197

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02508

SEQUENCE DESCRIPTION:

GATCAGCTGG AAGCTCACTA GTCATCTCCT GCCCAATCCC CAGAAACCCT GATTCAAGTC 60
TGCAGGCTCC TCGGGGCTCA CCACGGCTGC TGGCTCCGGT ACCATGTAAN NCCTAGGAAG 120
GTAAAGGNGC AGGCAACCTC AAA 143

SEQ ID NO:2198

SEQUENCE LENGTH:141

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02509

SEQUENCE DESCRIPTION:

GATCCAGTGA GATAGAATAC ATGTAAGTNT GGTTTTGTA TTTAAAAAGT GCTATACTAA 60
GGGAAAGAAT TGAGGAATTA ACTGCATACG TTTTGGTGTT GCTTTTCAAA TGTTTGAAAA 120
TAAAAAAAT GTTANGANAA A 141

SEQ ID NO:2199

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02510

SEQUENCE DESCRIPTION:

GATCCCTTGT GGCTATGCAG ATACCTACCT CACAGAGTTG TTGTAGAAGA CTGGTGGTTT 60
GGTTCAAACC TTGTGATTAA AGAGTTTGTC AAGCATTTTA TTCTTTTGAA TAAAGCAAC 120
ATATCNAAAA CATTAAA 137

SEQ ID NO:2200

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02511

SEQUENCE DESCRIPTION:

GATCCCTGTT TAACTCCAAA TTACAGTCGG ACTTGGATAC ATCATTGTGA ACATTGTAGG 60

AAAGAAAAA GTCTTGTTN TGAAAAACGA TTTGCATTG GGTAAATAA AGTGACCATG 120
CTTTTGTCT GTAAA 135

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SEQ ID NO:2201
SEQUENCE LENGTH:135
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02512

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SEQUENCE DESCRIPTION:
GATCCAGCTC AAGTGCCATC CTGCCAGTGG CCCCAGACT GTGGGGTTGG GACGCCTGGC 60
CTCTGTGTCC TAGAAGGGAC CCTCCTGTGG TCTTTGTCTT GATTTNCTT AATAAACGGT 120
GCTATCCCCG CAAA 135

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SEQ ID NO:2202
SEQUENCE LENGTH:133
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02513

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SEQUENCE DESCRIPTION:
GATCACTACT GCTCTTGAG TTCCTTCTCC TAAAGCTAAG GCCAGCCTCC ATCACAAATG 60
CCCATAAAT CTGGCTCGTC TTTGATGAAC AATAAATATT TTTGAACAA ATAAATAACT 120
GCCCTGCATT AAA 133

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SEQ ID NO:2203
SEQUENCE LENGTH:138
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02514

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SEQUENCE DESCRIPTION:
GATCCTCCCG CTGGCTTCCA GACAGACCTG GGATTTTGGC AGTCATGCCG GGTGATGGTG 60
TTCCTGCGGA GACCCTCAGT TGTCTATTC CTTCTAGCT TCCCTGCAAT AAAATCAAGC 120
TGCTTTTGTG GGAATAAA 138

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SEQ ID NO:2204
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02515

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SEQUENCE DESCRIPTION:
GATCATTCA CCTGATGTTT TTAAAGCATC CTAAGTACAG TAGAGTAGAA AACTNATTTC 60
TTTGTTAATT GTACACTGAA TAATGCCTTT AAAAAATCAA AATAAATTA ACAAATAATG 120
GTGAATGAAA 130

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SEQ ID NO:2205
SEQUENCE LENGTH:176

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02516

SEQUENCE DESCRIPTION:

GATCTCCTAT GTTACCAATG TGTATCGTCT CCTTCTCCCT AAAGTGTACT TAATCTTTGC 60
TTTCTTTGCA CAATGTCTTT GGTGCAAGT CATAAGCCTG AGGCAAATAA AATTCCAGTA 120
ATTCGAAGA ATGTGGTGT GGTGCTTTCC TAATAAGAA ATAATTTAGC TTGAAA 176

SEQ ID NO:2206

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02517

SEQUENCE DESCRIPTION:

GATCATGTTA TGAATTTGTA ACATTCACAC AACACCTCAC TTTTNAATCT ATAAAAGAAT 60
TGCACGTATG ANAAACCTAT ATTTNAATAC TGCTGAAACA GACATGAAAT AAAGAATTTA 120
AAGAATGAAA 130

SEQ ID NO:2207

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02518

SEQUENCE DESCRIPTION:

GATCTAGCTT CTGGCTCTGT GTGTTTATTG ACCAGTGGTG TGCCTTGAGA AACCAGAACT 60
CTCTGAATTT CAGTTTGTG TCTNTNTAAA TGAAGAAGGT TGTAATAAAA AAAATCTCAA 120
GTTTCAAA 128

SEQ ID NO:2208

SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02519

SEQUENCE DESCRIPTION:

GATCCGTCAT GGNCAACGAG AAGCACAGCA AGAACATCAC CCAGCGCGGC ATACGTCGCC 60
AAGACCTCGA GAAATGCCCC CGAAGAGAAG GCGTCTGTAG GCCCTGGTTA TTGGCTCTCT 120
TCACTTTTGT NGTCTGTGGT TCTGCAATTT TCCAGATTAT TCAAAGTATC AGGATGGGCA 180
NNTGAAGTGA CTGACCTTAA NTGTTTCCAT TCTNCTNTGA ATTTAACTTA ACTCATTCTC 240
GATGTTTGAN CCCTGGTTNA ACAATTCAGT AAANATCTGC TAGAATNCTT NCTATCATNT 300
TCATGTGCAT TCAAGNTTCT CATNGCATCC ANGTTCTAGN CAACACAGN 349

SEQ ID NO:2209

SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS02520

SEQUENCE DESCRIPTION:

5 GATCACCAGG CAGCGACCTC CGCNCACCCC AGCAGTCGGG AGCCTCGGCC CAGCCANAGG 60
AAGCGNTGCC GNCGGACCTG ACTGACTTCC CAGTGGAAGT GCCTTCTTNG GCTGGGACAG 120
CCNTTTN 127

SEQ ID NO:2210

10 SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02521

SEQUENCE DESCRIPTION:

15 GATCTGGGCC ACTTCCTCC TTCCAGTCAT GAGTAATCAT CAAGGAGCAA GTTGGAGTGT 60
TTCAGGTGTA TATTTTGTAG AACCCAAAAG ATTGGAGCCT TAACAATAAA CATCAGCACT 120
AAGAAA 126

SEQ ID NO:2211

20 SEQUENCE LENGTH:126

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02522

25 SEQUENCE DESCRIPTION:

GATCTTTTCAT AAAGCAGAAT GGTACGTATC GGATTGTTTT AATGTTATAT ATTGGATTGT 60
ATTGTTGTT ACAAACCAA TATTCTATGG AGAATGAAAA AAATAAAGGA CTAAATTAAC 120
TGGAAA 126

SEQ ID NO:2212

30 SEQUENCE LENGTH:127

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS02523

SEQUENCE DESCRIPTION:

40 GATCTCGCAA AGTTATTCTT CCACCATGGC CAACAACGAA GGACTTTTCT CCCTGGTGGC 60
GAGGAAGCTG AGCAGACCCC TGTGATGCCT GTNACCTCAA TNAAAGCAAT TCCTTTGACC 120
TGTCAAA 127

SEQ ID NO:2213

45 SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02524

SEQUENCE DESCRIPTION:

50 GATCAATGTA CTTTTTATAA ACTTGCCATA GATATCTCAG ATTTGAAACC TCAAGACAGA 60
TTTATTATTC TTAAATGCTG TATGATAATG AAGAAAAATA AAAATTTATT TCTTGCAAAG 120
TTAAA 125

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EP 0 679 716 A1

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121

SEQ ID NO:2214
SEQUENCE LENGTH:121
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02525
SEQUENCE DESCRIPTION:
GATCAGTTTG GAGAGTAGGG GGCCACTCAT ATTCTGGGCT CCTGGAACCA ATCCCGTGAA 60
AGAATTATTT TTGTGTTTCT AAAACTATGG TTCCAATAA AAGTGACTCT CAGCGAGCAA 120
A 121

15
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124

SEQ ID NO:2215
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02526
SEQUENCE DESCRIPTION:
GATCCCCGCA TGGTGTGGG GGTGCTGGTG TGTCTGGTG CCTGGACTTG AGTCTCACCC 60
TACAGATGAG AGGTGGCTGA GGCACCAGGG CTAAGCAATT AAACCAGTTA AGTCTCCAG 120
GAAA 124

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120

SEQ ID NO:2216
SEQUENCE LENGTH:120
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02527
SEQUENCE DESCRIPTION:
GATCAAAAAG GGGTCTGAGG TTGCATCAGG GAGACAACTG TAATGATATA AGCAATAGTT 60
GAGAACCCTGA CAGCAAGTAA TAAGACAGGA AGAATAAAAC TAGAAGAAGT CAGAATGAAA 120

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120

SEQ ID NO:2217
SEQUENCE LENGTH:120
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02528
SEQUENCE DESCRIPTION:
GATCTGAGTT CTGAGCAAGT CAGACTCCTT CCTTTGGCC TCCAAAGCCA CAGATGTTGG 60
CCGGCCCAACC TGTTTAACTC TGTATTATT TCCAATAAA GAAGGGCTTC CAAAGGCAAA 120

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120

SEQ ID NO:2218
SEQUENCE LENGTH:120
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02529
SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

GATCGGAACT GTAAAGCTAT AATCCCCAGA ATTAAAGTTT TTATTATTTT TTATACATTG 60
TAAACATAG ACGTTTATTT ATGTGATTAA NTTCTATTAA AATTACATG CTAAANTAAA 120

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SEQ ID NO:2219
SEQUENCE LENGTH:115
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS02531
SEQUENCE DESCRIPTION:
GATCCAGTTT TTCTTGGGAG GTTGTATCTG GTCATAAGGT AAACATTCTA TATATTCTAT 60
GCCTGCTCTA GAATTGAAAG ACTTCAGCAG TATTAAAGCA TTTTTAATC TTAAG 115

15

SEQ ID NO:2220
SEQUENCE LENGTH:122
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS02532
SEQUENCE DESCRIPTION:
GATCTGTATT TGTATATGCT GATGCAATGA TAAAAATCAC TGTAATAGNT TCATTGTGTT 60
GTACTGGATG CAAAGCTAGA AAATATTGCA ATANNTGAGA CCGATGAAAG ACTTCTCTGA 120
AA 122

25

SEQ ID NO:2221
SEQUENCE LENGTH:110
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

30

CLONE:HUMGS02534
SEQUENCE DESCRIPTION:
GATCTTGGGC AAGTTAATCT CTGGGAACCT TGGGTTTCTT ATCCTCAAAA AAGGCGATGG 60
AAGGNCTGGG NCNCGTGATT AAATAAAGC AACGCAAGAA AAATGCCAAA 110

35

SEQ ID NO:2222
SEQUENCE LENGTH:109
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS02535
SEQUENCE DESCRIPTION:
GATCGATGGT ACTTTTGAA AATGCTTTAT TGCAAAAAAG TGGCTAGGGT TTTACAAGGN 60
CTATGAAGAA ACATATTAAG GTTAATAAAG,CTTTTATTG AGTGTTAAA 109

45

SEQ ID NO:2223
SEQUENCE LENGTH:105
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

50

CLONE:HUMGS02537

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SEQUENCE DESCRIPTION:

GATCCTCCCT TAGAGCATT GGAAGAGTGT GGCCCTGCCA ACACCTTGAC TTCAAACCTC 60
TGGCCTCCAT AACTATGAAA TAAATNCTTG TTGTTTAAAG CCAAA 105

SEQ ID NO:2224

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02538

SEQUENCE DESCRIPTION:

GATCTGTCCA CTCTGGTGT CAAAGATTTT ACTCATCTTC TTAGTACATT CTATGTATTT 60
NATATGTATA ATTTTATACA ATTAATAAATA GATTTTNGTC TAGTGAAA 108

SEQ ID NO:2225

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02540

SEQUENCE DESCRIPTION:

GATCTTATAT CATTACAGTA GCCTTTTTGT AGAATCCATC CTATTTTCCA CATGGATAAT 60
CATGTCATGA AGAATAAAGA CAGTTTTACT TCTTTCCTTA AA 102

SEQ ID NO:2226

SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02542

SEQUENCE DESCRIPTION:

GATCCCAGGG GAGGGGTCTC TCCTCCCACC CCAAGNCATC AAGCCCTTCT CCCTGCACTC 60
AATAAACCTT CAATAAATAT TCTCATTGGT CAATCAGAAA 100

SEQ ID NO:2227

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02543

SEQUENCE DESCRIPTION:

GATCTGCTGC TTCCAAGTTG TGTGACCTTG GCTAAGTCAC TTAACCTTTC TGATTGTCAT 60
TTCGCTTTTT AATAAAGTGG GTCTGGTGAA CAAGAAA 97

SEQ ID NO:2228

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02544

SEQUENCE DESCRIPTION:

GATCCCACTG TATGGCTATA CGGTATTTTA TCAGTGCATC CACTGTCGGG TTTTCCCCT 60
 TGTGGACTAT TATGAATAGT GGACGCTTGT GTGCAA 97

SEQ ID NO:2229

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02545

SEQUENCE DESCRIPTION:

GATCAGGTGA GCTGTGTCCA GAAAACCAAC GAGAAGGAGT GGAAGGAGGA ATGAACGTTT 60
 CATTCTCGTT AATAAAGGCA TTATCCTAAT TAAA 94

SEQ ID NO:2230

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02546

SEQUENCE DESCRIPTION:

GATCTAATCT ATTCCTGGGG CCATAACTCA TGGGAAAACA GAATTATCCC CTAGGACTCC 60
 TTTCTAAGCC CTAATAAAA TGTCTGAGGG TGTCTCATGA AA 102

SEQ ID NO:2231

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02547

SEQUENCE DESCRIPTION:

GATCATATAT TTGTGGCATA CAGTGTGATG TTTTGACATG NATATAATTT TGTATACAAT 60
 GTGGAATGAT TAAACAAGC TAATTAACAT AAA 93

SEQ ID NO:2232

SEQUENCE LENGTH:92

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02548

SEQUENCE DESCRIPTION:

GATCTGCACT TCCTCCCCTT TCACCTACCT GTACACCTAA CCTGGCCTTA GACTGAGCTT 60
 TATTTAAGAA TAAATCGTG GTGGTGGTCA AA 92

SEQ ID NO:2233

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02549

SEQUENCE DESCRIPTION:

GATCAGTGGC TGCTGGGTGG CGGGTACCCT TNCTCAGATG CCTGGCAGGN CTGGNTGGCG 60
 ATTCATAAAG ACCTCGTGTT GATTCCCCAA A 91

SEQ ID NO:2234

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02551

SEQUENCE DESCRIPTION:

GATCTAACCC CTTACCCATC TNTCTACTGC TGGACTGTGG AGGGTCACCA GGTGGGAAC 60
 ATGCTGGAAA TAAACAGCT GCAACCAA 89

SEQ ID NO:2235

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02552

SEQUENCE DESCRIPTION:

GATCTTTTTG AGAGAAACAA ATGAGGATTG TAAAGTTTGG GGACTTACCT CTGTAGCATT 60
 GTGAAAATAA ACTTTGATTA AGCTGAAA 88

SEQ ID NO:2236

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02553

SEQUENCE DESCRIPTION:

GATCACCTCG GCGTCTGTTT TGTATGCTCT TTACCTATGG ACTAGTTTGT GGACGGCTAA 60
 GAAATACAGC CTCAGCATTG ATTTGAAA 88

SEQ ID NO:2237

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02554

SEQUENCE DESCRIPTION:

GATCTTAAGG AGTGTAATTT GCAATCTAAT TTTATCCTCT TACTCTGTGT TGTAAACCA 60
 TATACAATAA ACGGTGTTTA TGGAGAAA 88

SEQ ID NO:2238

SEQUENCE LENGTH:96

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02555

SEQUENCE DESCRIPTION:

GATCTGGCTG TGAGGCCCTC AGGGCAGGGA TACAAAGCGG GGAGAGGGTA CACAATGGGT 60
 ATCTAATAAA TACTTAAGAG GTGGAATTTG TGGAAA 96

5

SEQ ID NO:2239

SEQUENCE LENGTH:86

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS02556

SEQUENCE DESCRIPTION:

GATCCGGGGA CCAGGGGCTG ACCTCCATTC GTACCCCACT GCTTTGGAGN TGATGGGACT 60
 ATCAATAAGA ACTCTGTTCA CGCAA 86

15

SEQ ID NO:2240

SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS02557

SEQUENCE DESCRIPTION:

GATCAAACCA TTNACCTGG AGTTTGGTAC TGGTTTTAAC TTCTCTNAAT CTGTATAAGA 60
 AAAATGAAGA CAATTGAACT TTCAAACAAA 90

25

SEQ ID NO:2241

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02559

SEQUENCE DESCRIPTION:

GATCCAAGTT TTGCGGGGTC TAAAGCTGTG TGTGTTGAGG GGGATACTAA GTTTATGAAA 60
 AAGAATAAAA AACACAACCA CGAAA 85

35

SEQ ID NO:2242

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02560

SEQUENCE DESCRIPTION:

GATCTCGCCA CTNTTCTCCA ACCTGGGCAA TAAAGCAAGA NCCTGTCTTC AAACAAGCAA 60
 ATAAAAACTT CCTTATCCTG CAAA 84

45

SEQ ID NO:2243

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS02562

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SEQUENCE DESCRIPTION:

GATCCTGTTA GCTTTCTGAA TGTTCGTGG TTGAATGTGT TTTTGCTTAA ATAAAGCTTT 60
 TGGTATTTGT TTAAATTAAA 80

5

SEQ ID NO:2244

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS02563

SEQUENCE DESCRIPTION:

GATCCCAACC GTTTGGCACA GCTTTGGCCA CAGCCAGGCC CCTCTGGAAT TGTCTTATT 60
 AAACCAAGTTT CCCGAGAAA 79

15

SEQ ID NO:2245

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS02564

SEQUENCE DESCRIPTION:

GATCCGGGTC AATGCTTCGT TTTCTAAAGG ATGCTGCTGT TGAAGCTTTG AATTTTACAA 60
 TAAACTTTTT GAAACAAA 78

25

SEQ ID NO:2246

SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02565

SEQUENCE DESCRIPTION:

GATCTTGGTT TTCCATGAAT ACAGCATGTA TAATAAAAAT TTTAAGAAAT AAATGTTATT 60
 CTACTTTATT AACAAA 76

35

SEQ ID NO:2247

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02567

SEQUENCE DESCRIPTION:

GATCTTCTGC CGGGCGTGCC CCAGAGGACA GTGGGTGGAG TGGTCCTACT TATTAAATGT 60
 CTCAGCCCCT CAAA 74

45

SEQ ID NO:2248

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS02568

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SEQUENCE DESCRIPTION:

GATCTCACCT TTGCAAAGTT GGATAGTCAA TTGTTTTTA GAGGAAATAA AACACTTATT 60
CTGTGATTTT AAA 73

SEQ ID NO:2249

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02569

SEQUENCE DESCRIPTION:

GATCTGGAGA GAAAAACATT CAAACCATTG CATCATACAA AAAAAAGGCT ATTAAAAATT 60
GGATTATAGC AAA 73

SEQ ID NO:2250

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02570

SEQUENCE DESCRIPTION:

GATCAGAGTA AGAATGTCTT AAGAAGAGGT TTGTAAGGTC TTCATAACAA AGTGGTGTTT 60
GTTATTTACA AA 72

SEQ ID NO:2251

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02571

SEQUENCE DESCRIPTION:

GATCAAAATCT GTACAGTTTC TATTGTTCCA GATTTTTTTA AGTTTGTTATT AAAAGCATGA 60
TACATAATAG TAAA 74

SEQ ID NO:2252

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02572

SEQUENCE DESCRIPTION:

GATCTTTTCA GTGTTTTTTC ACTTTAGCTA TGTGGATTAG CTAGAATGCA CACCAAAAAA 60
ATACTTGAGC N 71

SEQ ID NO:2253

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02573

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCCAGGAG GGAGCCACCC CCAAGGACCC TGCCAGCCAC AGACCTCCAA TAAAGACAGC 60
ATGGAAACAA A 71

5

SEQ ID NO:2254

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS02574

SEQUENCE DESCRIPTION:

GATCTGATGT GAATTCAGAT TTCCAATCTT CTCCTAGCCA ACCATTTTCC TGGAATNAAA 60
AATTCAGTAA A 71

15

SEQ ID NO:2255

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS02575

SEQUENCE DESCRIPTION:

GATCCAGAAG TTCTAAATCC AGGATTTTAA TTAGTAACTC AAATAAAATG CCACACATT 60
TCATACAAA 69

25

SEQ ID NO:2256

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS02576

SEQUENCE DESCRIPTION:

GATCATAGTA GTGCCGCTGT TGAGTGATAA AGCAACTTGT CATTAAAGAT GTGTGTNCAG 60
ACATGGAAA 69

35

SEQ ID NO:2257

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02577

SEQUENCE DESCRIPTION:

GATCCCAGCC CAAATNNGCC CATTACACA ATCAGGAGCN AAATAAATTA CTGTTGTCTT 60
AACACTAAA 69

45

SEQ ID NO:2258

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS02578

55

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCTTCAGC TGTTCGCCG TNCTTATTAC ATAACTGAA AACAGGATAA AAACGGAGTG 60
CAATGAAA 68

5

SEQ ID NO:2259

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS02580

SEQUENCE DESCRIPTION:

GATCTGTCAA AGATATGAAC ATGAAAGAAC AGCTTATTTT AATAAACCCA CTTACATAC 60
AAA 63

15

SEQ ID NO:2260

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS02581

SEQUENCE DESCRIPTION:

GATCAAAAGT AAATGTTCTC TTGCCATTT TAGATGGAAA AATAAAAAA ATTAAAAAGT 60
AAA 63

25

SEQ ID NO:2261

SEQUENCE LENGTH:86

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS02582

SEQUENCE DESCRIPTION:

GATCTACATG AAGGAACTGT AGATGATGTA TTTTTCAT CTTTTTGT AACTGATTG 60
CAATAAAAAAT GATACTGATG GTGAAA 86

35

SEQ ID NO:2262

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS02583

SEQUENCE DESCRIPTION:

GATCCCTTTT TTATTTGTG GTTTTAAAT ATAGTATAAA AATCCTTTTA AAAAAACAAA 60

45

SEQ ID NO:2263

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

CLONE:HUMGS02585

SEQUENCE DESCRIPTION:

55

EP 0 679 716 A1

GATCAAAACA GGATTCCATT GACCTAATTA TATTAAGCTA ATAACTAAT TTTTGAATT 60
TTTGAAA 67

5 SEQ ID NO:2264
SEQUENCE LENGTH:58
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
10 CLONE:HUMGS02586
SEQUENCE DESCRIPTION:
GATCAATATT TATTGACTTG TAGTAACTGC CACCAATAAA GCAGTCTTTA CCATGAAA 58

15 SEQ ID NO:2265
SEQUENCE LENGTH:55
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02588
20 SEQUENCE DESCRIPTION:
GATCAATAGA CTGTACTTAT TTTCCAATAA AATTTTCAAA CTTTGTACTG TTAAG 55

25 SEQ ID NO:2266
SEQUENCE LENGTH:53
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02589
30 SEQUENCE DESCRIPTION:
GATCATTCTC AGTATCCACT GTCTATGTAC AATAAAGGAT GTTTATAAGC AAA 53

35 SEQ ID NO:2267
SEQUENCE LENGTH:53
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02590
SEQUENCE DESCRIPTION:
40 GATCCATTN TTTGTGAAT GTGCTAAATA AAAAGTGTTA TNAATTGCTG AAA 53

45 SEQ ID NO:2268
SEQUENCE LENGTH:52
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02591
SEQUENCE DESCRIPTION:
50 GATCCTGCAT CCCACTCCCT GGGAGCCAAT AAAGTGCATT TTCACAGGCA AA 52

55 SEQ ID NO:2269
SEQUENCE LENGTH:50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02592

SEQUENCE DESCRIPTION:

GATCACAAAG TCAAAAACCC ATAAGAAAAA TTGAAAAAGC TACAAGCAAA 50

SEQ ID NO:2270

SEQUENCE LENGTH:50

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02593

SEQUENCE DESCRIPTION:

GATCATATTT TCTATTAAAG TGGCTAACAC CTGGCTACTC TTACTGTAAA 50

SEQ ID NO:2271

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02612

SEQUENCE DESCRIPTION:

GATCTGTAAA TAAATCAGT GCACTGTGAA TCACACCCAG CCCCTTTCCC TGCTGTGTGG 60
 ATTAGGTGTC AAGACACCTA GTTCTTTCTG GGGCCACCCG GCTGGCCTCA CTGCTTATAT 120
 TAAGGCTCCT CCCAACTCTC ATTTTCCTTT GGAAAACAAG ACTTTTTTCC CCATGGTTAC 180
 CGCTGAGATA CTGGGGCTGT AGTAGTATAA AAGCTCACAG TTCCTTCTGA GTGCTGAAAA 240
 GAGTGCATGA GTTGCTTCGA AATAAAAGGG TCAAGCATTG CTACCTGAAA 290

SEQ ID NO:2272

SEQUENCE LENGTH:556

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02627

SEQUENCE DESCRIPTION:

GATCTGTGCT TCCNACTCAC ATGTNAGGCC ACGCCATCCT CTTGCTGAAN CCCTATTGAT 60
 GCTTTCTAAC AGGTTCTCGT GTCTCTCCCT GACCAGGCC TCTTACAGAC TGCAGAATTA 120
 CCATCCACAG TGTACATTGG ATGAGAATGT GTCACCACCA TGCTTAGAAC CACTCCTATC 180
 ACTGACAGGT CAATATCTGA GCTCCTTGGC ACAACACACA TGTCCAGGGA GTGGCCAGTA 240
 ATTAGTTGTG CCTGGAGTAT TGAGAGCATC AGTGGCCGGG AACATCAGGC AAGATGTGAT 300
 GTTTTAAAGA GCCTTGAATG CCATGCTAAG GACTTNGAAC TGCATTGCAC AGCCCATGGG 360
 GAGCTCTGGA AGGTTTAAAA GCAGNGAAGA NCCTTGCCTT TGTCTAAATT CTGTAAGTCT 420
 CAAGCACTTC TGCTTTCCTT CATAGNACTT TGTAATTAT TTCAATTGGC TTGGTTNATT 480
 TTTTNCNNA TTTTCCCCTT AAATTTCAAN GTTTTGGGC GGGATTAAAT NNTGGCTTTT 540
 TTGNTCNCNT TTTAAA 556

SEQ ID NO:2273

SEQUENCE LENGTH:527

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02628

SEQUENCE DESCRIPTION:

5 GATCTGAACA TCTGGCCCAA GTGAAGCATG GCATATAGTG CCCTTGGAAG AAAATTAGGC 60
 CTCAAATGAC AGTAGCATTG AAGTGTTTGC TGCAGAGTTG AGGGAAACCC CCAGCCACCC 120
 TCCCGGAATC CGAGATAGGG TGGCAGATCT GTCCTGACAG ACGAGGAGTG TAACTNAACC 180
 10 AGGAATATTT CCTCCATTCC TGCTCTCCCA CTGCACACAG GGTGGTGGCA CATTATCCCT 240
 CTGGGGGGTG GGGACGCGTG TTGTTTGGC TCAATTGGG TTTGTTGGTC ACATGGAGCT 300
 CTTCCATTTC GTTGAAGTGA ATAATGAGTT GTTCCTAGAG GAGACAGCCT GTCTCTCCTT 360
 GTTNCCNCA AAGCCCATGN CCTGNCGTGG TGGANCTGGG GCTTTTGGNT GGGGAGGGGN 420
 CCAACAATG GATNTTNTN CCTTNCCTCG AATTCCAACG GANTNNAATG TNCAAAGGCC 480
 15 CTTTNGAAAC TTGGNGGGAA ANTTAATTNC TNTNCCCTNG NNGTGGN 527

SEQ ID NO:2274

SEQUENCE LENGTH:458

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS02629

SEQUENCE DESCRIPTION:

25 GATCAGCAGC CAATATGGGT TTGTTTGGTT TTTTAAATC TAAAAACAN CCTNTAGAGG 60
 AATAGAAACA AATTTTATG AGCATAACCC TATATAAGA CAAAATGAAT TTCTGACCTT 120
 ACCATATATA CCATTAGGCC TTGCCATTGC TTTAATGTAG ACTCATAGTT GAANTTAGTG 180
 CAGAAAGANC TCAGATGTAC TAGATTTTCA TTGTTTATTG ATATGCTCAG TATGCTGCCA 240
 CATAAGATGA ATTTAATNNN NNCAGCCAA AGCAATATAC TCTTACATGA TTTCTAGGCC 300
 CCATGACCCA GTGTCTAGAG ACATTAATTC TAACCAAGTTG TTTTGCTTNT AAATGAGTGA 360
 30 TTTCCATTTT GGGGAACAGG TTCAAATGG ANTATATNTA CATGGGTAAA ATTCCCCTGT 420
 GCTAGTGTAG GNCTTTCCTN GGGGAATGTT TTATGGGN 458

SEQ ID NO:2275

35 SEQUENCE LENGTH:452

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02630

SEQUENCE DESCRIPTION:

40 GATCGACTAC AAGCCAGCCC CTANGCACCT GCTGCTACAT CATGAAGNTA NCTCCAGAGA 60
 GCATCCCCAG TCTTGAGGNT CTCAATAGAA AAGTCCACAA CTTCCAGGCC AAGCCCGCAG 120
 TGCCTACGTC TAAGCTGGGC CAGGCAGAGG GNCGAGATGC AGGCTCAGCA CCTCCGGAG 180
 GGGACCCGGC CTTCTGGGN NTNGCCGTNA NCACCCTGTG TGGCGAGGTG CCGCTCTACT 240
 45 ACATCTAGGA CGNCTCCGT GAGCAGGGTC AGTGAAGCC CCAACGGGAA AGGAAACGCC 300
 CCGGGCAAAG GGTCTTTTGC AGCTTTTGA GACGNGCAAG AAGCTGCTTT CTTCCACAA 360
 CCGNAGGACC AAAACCCTTG GAGAAANTGN GNAGNTTGGN GGAGATGGAT TTGGGAGTTT 420
 GGCAANAGGG TTGGACCCNA NGNGGGCCCG GN 452

50 SEQ ID NO:2276

55

SEQUENCE LENGTH:451

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02631

SEQUENCE DESCRIPTION:

GATCTTGTTT ACTTTTGGAC ATCAAGCCCA TCACTGCCAG CCAGTNAAGA AGGATTCCAG 60
 CCTATGCCCT CAATCACAAT AAGACCACCA GATGACCAAC ATCTTCCTAC TGCAAAATACT 120
 TGCATTTCTC GACTTTACGT CCCACTCTAT TCCTCTAAAC AGATTCTCAA ACAGAAATTG 180
 TTAAGACCAA GAATNTTGGC NNGTGTAGA GTATAAAAAG TGTGTATTGC 240
 TGTGTAATAT TACTAGCAA TTTTGTAGAT TTTNTCCAT TTGTCTATAA AAGTTTATGG 300
 AAGTTAATGC TGTCATACCC CCCTGGTGGT ACCTTAAAGA GATAAANTGC AGACATTCCCT 360
 TGCTGAGTTT ATAGCTTAA AGGCCTAAGG GAGCACTAGC AANCATTTTG GGCTATATTT 420
 GGGTTTGCTA GGTACCAAC TTTCTGGGG N 451

SEQ ID NO:2277

SEQUENCE LENGTH:446

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02632

SEQUENCE DESCRIPTION:

GATCCAGCCA GGCATCTCGG CGCTTTGGCA CCATGAGTTC TATGTCGGG GCCGACGACA 60
 CTGTGTACAT GGAGTACCAC TCATCGCGGA NAAGGCGCCC AGCAAAATG TACACCCGCT 120
 CTTCAGCGC TTTAGGAAAT NATNCTTAGG CAGGGTACTT CGTTCAAGAC CGGCGCTTGG 180
 CACCCTTGTT GGAAAGGNT TTTCAGCATA ACATTTTCCT TCCACCTCTT TGACCTTCCC 240
 TCCAGCGTTG GCCAAATGT GCTGAGGAAG ATGCATCAAG NGNTTGGCTG TGCCCTTCATA 300
 GGTCATCTAG GGTTTATAA AGGAGGAGGA GACAATATTT NTTCAAATTT TTTTGGGAGT 360
 GGGGTCATTT TCTGTATATA AANAATGTTA ATATTAAAGG TGAGTTTAT GTTACCGTTC 420
 TGAATAAACA GATTNGGCCA TTNAAG 446

SEQ ID NO:2278

SEQUENCE LENGTH:425

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02633

SEQUENCE DESCRIPTION:

GATCCACACC TGACCCTGTT GGGTCGAGTT AGGNTGGGCC TTGGTCTGCA CTGTAGCACC 60
 TNTGTTCTTT GAGTTCACAT CATGAATGTG GTGACTTNCC AGNTACCATA TCAGGCTTAA 120
 CCTAGCACAT CCTATTTCTT TNCITCTATG ATATCCAAAT TGGACTGACC TCACTTCAA 180
 GTTGCTGTCC CATTTTGTCA CCCTATCTTA TCTCGGGGAA ATTGCAGACT GATGGCCAGA 240
 CCAACTCTGT TGAAATTCTT GCATAGAGCA AACCTGTGCT CATTTTAAAG TGGCATGGGA 300
 GAGGCCCCCA GCCTAGTAAA GCCTAGTCTG TGTCTTACA GTGCTGGTAG NATGNGTTT 360
 GTGTGTATAA ATATATGATA TAGGATTGAT AATATGTTNN CTAACGGCCA TATTATTGAA 420
 GGGCN 425

SEQ ID NO:2279

SEQUENCE LENGTH:414

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02634

SEQUENCE DESCRIPTION:

GATCTGCCCTT AACTCCAAC TACATGTTTT GGTCAC TATT ACAAAC TGT ATCCCAGAAT 60
 GATGCTGCAG AGGCTAGGGC TAGGACACAG ACCAGTGTTC CCATGTGGGA ATCCCTCCC 120
 AGTATTTCTT AGGAANNNTA TGTTTTTTGA ATCCATAATC CCTAGAAAA TCAGTTGAGG 180
 AAATGAGAAG TATTGTAATT ATNCTGTGAA TAGTAACACT TACCATTATG GAGACATCAC 240
 TAGTTTGAAA GANTCCAAC TCAATCAATN TTAACGTACC GAGTTGAAG NTACAAGANC 300
 TGAGACAGGA GCATAGCAGA GGAGAAACGG TCACCATCTC ATTAGCCCTA TTTTGGNT 360
 TGNTGTGATG CCATTACATC TGNAATAATC TGGGCGATNT CAGCTGCTAA TGGN 414

SEQ ID NO:2280

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02635

SEQUENCE DESCRIPTION:

GATCTCACCT TCCTCGAAT TCGCTCCAAG AAAATGAAA TTATGGTTGC ACCAGATAAA 60
 GACTATTTC TGATTGTAAT TCAGAAATCCA ACCGAATAAG CCACTCTCTT GGCTCCCTGT 120
 GTCAATTCCTT AATTAAATGC CCCCAAGAA TGTTAATGTC ANNNNNGTCA GTGGACTAGC 180
 ACATGGCAGT CGCTTGAAC CCACTCACAC CAATCCAGTG ACCGTGTGTG GGCTGNGGC 240
 TCTNTTCCC NCNCCAACGG AACCCNGTG TGCACCAACC TTTNCCNAG AGN 293

SEQ ID NO:2281

SEQUENCE LENGTH:400

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02637

SEQUENCE DESCRIPTION:

GATCTGGCAG GGCACCACAG CGCCCCCTAC TGAACCATCA GCATGTCAGT GGCATTAAAA 60
 GCCATGCAGC TGGAGGGGCC ACTGAGATTG TCTCTGAGTA TTAAGAGAA GCAACAGAAA 120
 AGAGCCATGG ATGGAGCCCT TGGGCTCTCT GGGAAATGGG AAATCAGCCA AAGGACTGAG 180
 AAGGAGTTAC CTTAAGGTCA GAGAAAACCA AGAGAGTGTG GTGTTCTGGA AGCTGAGCTT 240
 TCTTTATTCA ACCTCATTCC CTTCTCCAAA TAAGCCACTT GTGTAGTTGG GCCCCTCCAG 300
 GGTGAAGGC AAGAGGAGAA AGGCACAGCG TTTGGGAAAC AAGACTTTTC CTGCAATAGC 360
 CTGGGGAAGG AATAAAANGG ATAGAGGTGT TTGGGGGAAA 400

SEQ ID NO:2282

SEQUENCE LENGTH:400

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02638

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCTGTCCA ACGCCTGCAG CGTGGATGTG GAGGCGGACT AATCAACNAG TGCTCTGTTA 60
 TTATTTCTAC CCATCCCTTT TCTCCATGCT AATTGCTTA GAACITTAAC ATTGAATGGA 120
 CAGCAAAATGT CATGTTCTGT TTAATTATCA CTCCTTGACC ATTATGTTAA TTTCTTTCCC 180
 TAACAAGGTG ACGCATTGTT TTAAGTAACA ATGACCAACT CATCTACTCT TCTTCCAAAT 240
 TGTGTAAATT GAANGGGTAA AATGTGGGAA AACGCTAAAT TTGAATGCTA AATTGAACA 300
 TTTACACAA CCAATAATTT TGAAATGCTT CTTNGCAATA TTATNGCGGT TTCGGNACCA 360
 GGTTAAAAAT NNCITTCATT TTCAGGNCAT TTTGGTCAAA 400

SEQ ID NO:2283
 SEQUENCE LENGTH:386
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS02639

SEQUENCE DESCRIPTION:

GATCGATAAT ATAATTTATA ATGAAATTGC TTTATCAGCT ATTAATGTGA ACTACATCAT 60
 CTTCATATAG CNTTATACT CATTTGTGCT ATTCCATTTT CCTCTGTTCC TTTTATTTTC 120
 ACTTCCCTTG TAATGTTAGT CTCITTTGAC TGATTCTGA AGAGTTCATT TATGATTAAA 180
 CATGTGAACA TTTTGTCTAG AATTGCAAAT ATGTTTTTCC TCATTCAATT TACTATGGTG 240
 TTTTATTTT GGGTTATACA GAAGTNGTAT ATTGAAATAT AATCTNGTNC TGTTTTATGA 300
 CTTTGGAGTT TTGTGGTTTT TTNAACCAN GTTTACAGTG GNATCCNTNN ATTNNGGTATT 360
 GCCGTCNTAN TNCCNGCAGT TAGGTN 386

SEQ ID NO:2284
 SEQUENCE LENGTH:384
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS02640

SEQUENCE DESCRIPTION:

GATCTNNTCA AACAGCAAAC GCCCACAGAN GGCCAGAGG NGGTGGTAAT CAGGGTGTGT 60
 GGGTGNTTTT AGGGTTCITT AGTGTGTGTT CTTTCACCCA GGCGGTGGTG GTCCCAGCCA 120
 GTTTGGTGCT GACGGTGAGA GGAAATNAGA ATCTGTTTGC AAATTGTCCA ACCCAGCCCC 180
 TCAACATGAG GGGCTTCCAT TTTNTGTGTT TTGTAAGGGA ACTGTTTCCT TCATGCCGCC 240
 ATGTTCTTGA TATTAGTTCT GATTTCITTT TAACAAATGT TATCATGATT ANGAAAATTT 300
 CCAGCACTTT AATGGCCAAT TAAGTGAGAA TGTAAGAAAA TTGATGCTGT ACAAGGCAAA 360
 TAAAGCTGTT TATTAACCTT GAAA 384

SEQ ID NO:2285
 SEQUENCE LENGTH:383
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS02641

SEQUENCE DESCRIPTION:

GATCTTTTCT ATAATATCCT ACTACTTTGG TTTTCCTAGC TCCATACCAC ACACCTAAAC 60
 CTGTATTATG AATTACATAT TACAAAGTCA TAAATNTGCC ATATGGATAT ACAGTACATT 120
 CTAGTTGGAA TCGTTTACTC TGCTAGAATT TAGGTGTGAG ATTTTTTGTT TCCCAGGTAT 180

EP 0 679 716 A1

AGCAGGCTTA TGTGGTGG CATTAAATTG GTTCTTTAA AATGCTTTGG TGGCACTTTT 240
 GTAAACAGAT TGCTTCTAGA TTGTTACAAA CCAAGCCTAA GACACATCTG TGAATACTTA 300
 GGATTGTAG CTTAATCACA TTCTAGACTT GTGAGTTGAA TGACAAAGCA GTTGGACCAA 360
 AAANTTTATG GGCATTTAAA GGN 383

SEQ ID NO:2286
 SEQUENCE LENGTH:424
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02642
 SEQUENCE DESCRIPTION:
 GATCTAAAT ACCTGGTGGC TTTTNACAAA AAGCAGATT TNTTCATGTA CTGTNATGTC 60
 TGATGCAATG CATCCTAGAA CAACTGGCC ATTTGCNAGT TACTCTAAA GACTAAACAT 120
 AGTCTTGGTG TGTGTGGTCT TACTCATCTN CTAGTACCTT TAAGGACAAA TCCTAAGGAC 180
 TTGGACACTT GCAATAAAGA AATTTTATTT TANACCCAAG TCTCCCTGGA TTGATAATAT 240
 ATACACATTT GTCAGCATTT CCGGTCGTGG TGAGAGGCAG CTGTTTGAGC TCCAATGTGT 300
 GCAGCTTTGA ACTAGGGCTG GGGTTGTGGG TGCCTCTTCT GAAAGGTCTA ACCATTATTG 360
 GATAACTGGC TTTTCTTC CTCTTGGAA TGTACCATTA NAAATAATTT TTTGAACCAT 420
 CAAA 424

SEQ ID NO:2287
 SEQUENCE LENGTH:378
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02643
 SEQUENCE DESCRIPTION:
 GATCCGAAGA GGAAGGGCGG TCCGGGCTCC AACTTAGCT TCGTGGGCAA ACGCAGAGGC 60
 GGAACAAAC TAGCCCTNAA GACGGGAATA GTAGCCAAGA AGCAGAAGNC GGAGGATGAG 120
 GTATTAACAA GTAAAGGTGA CGCGTGGGCC AAGTNCNNGG CAGAAGTGAA AAAGTACAAA 180
 GCTCACCAGT GCGGTGACGA TGATAAACT CGGCCCTGG TGAATNACG CCCCTCCCCC 240
 ACCTGCCCAT GGCCTGGGAC TCTCTGCGAT GTACATAACT ATTTAATGCA GCGGCANGTC 300
 GACAGCTTTC CCTGAGAGGA CTTAAAAGCA GAAGGAAACC GAGATGCTTC CCGNAAGCCG 360
 TGGACGATTC TCCAAGGN 378

SEQ ID NO:2288
 SEQUENCE LENGTH:370
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02644
 SEQUENCE DESCRIPTION:
 GATCTTCTTG ACTATGCCAG TTGTAGTACC AGCTTCTGTA TCTGCACTGA ATTCTGNCTC 60
 AGTAATATGC CTTGTTTTAA AATTAAATA TTTTTCATT TTTTAACT AGAAAAATAAT 120
 TATAATGAAN NNNNTAAGTA TCTCATTTTA GGATTCTGAT TTACATAGGT ATCACTGTAA 180
 CTTGTGCTGT TTGCATAGGT ATACTCTATC TTGTGCTATC TGCATAAAAT ATCCAAGTAA 240
 ACACATTGTG ATTTTACATC CGTGCATAGA AAAAAAATC ATCTGAACTC AAATCAATCT 300

EP 0 679 716 A1

GTTGATACTG ACTAGATTGG TGACGTGTTT ATGTGTACCA CTAGTGATAA TGCACGGTCC 360
TGTACAAGCN 370

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SEQ ID NO:2289
SEQUENCE LENGTH:370
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02645

SEQUENCE DESCRIPTION:

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GATCACAGGA ACAGCAGGTG ACAGGCCTAG CTATAGTTAG GAATACACAA GCCGTAAAAT 60
CGAGTCCTTA CAGCCATACC ACAAGGTACG TCCANNTGGA CTACAAGAAG AGCTTCCTTT 120
AAAGTTCTTA TTTCAGCATA AAGAGGCTGT CCTTTTTTTT NAGGAATAGT TTGGACCTTG 180
TGCCCTCTGT GGGAGGCTGA GGAAGTCAAG AGGAGAGCTA GCAGATATGC CTGTTCCACC 240
CTCTCTGGTA CTTGTGGCTT GCTAGTATGT TTTNATGATA ATCTCGGGCA TTGTTTGCAT 300
TTGTGTTTAT TAATAGGGTT TTTGTTTTTT GTTGTTCCT NTTTTNACAG TAANGGCTGA 360
ATTACATAAA 370

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SEQ ID NO:2290
SEQUENCE LENGTH:367
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02646

SEQUENCE DESCRIPTION:

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GATCTGAAAG GAATGCTAGA AGTGTTTAGA GAGCTGACAG ATGTCCGACG CTAAGGGGG 60
CATGCNACAG GGGGAATGGC TCGCTTCAGT GCCCTGCTGC TCAAAGCTCT AGGGNAGAAT 120
GCAGTCGGGT AGNCTGTGGG GCTCTAACC CACAGCAACC TCTAGGGATG ACGTCACTAA 180
AAACCGATGA AGCCTCCATA ACATTGGTTC CTTACTGACG CTGAGGAGCA NGGCAATCTT 240
CACACCTTAA CCAATGCTAT TCATGTAGGA TGACCAAGAA ATGAATGTTT CTTACTGAAA 300
TAATACATAT TTTTGGCATC TTTTGGTTAC CCATAGACTA ATTAAANCTA ATCCNNGGNT 360
TTATAAA 367

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SEQ ID NO:2291
SEQUENCE LENGTH:359
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS02648

SEQUENCE DESCRIPTION:

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GATCCTGACA GAGCCCTGAA CAGATTATAT CACTCGGCTA GAGGCACTGC AAAGACGACT 60
TGGAACATATA CAGTCAGGTT CAACTACTCA ATTCATGCT GGCATGAGAA GATAATCCTT 120
TGAAACATCA TTAATTGAAG TGATTTTAAA TAGATTTTCTT TTTGTAAATC AATGGTTCTT 180
TTGTGCTTTN GNNNNNNCGA ATATTCAATG GGACCAATAT GAACACAGCT TATGATTGTA 240
TACAAATCCC TTGCCAGCAC ATGAAANCAA ACTGGANTTT GTATATATAA GCATTGTGTA 300
TGTATTTCATG CACAATAATT ATNGANTTAC CTGTATATTT GTGGGAATGC TAATTAAAN 359

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SEQ ID NO:2292

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SEQUENCE LENGTH:357

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02650

SEQUENCE DESCRIPTION:

GATCTGTGGG TCCGGCTGNA GGAGAGTGAC ATAGTCCCGC AACTCCANNT TGCCTGTCCT 60
 GGACAGGCAC ATCTCCACTG AACTGCGGCT CCNTCGCCGT GGGCAITCCC ACCACAGCCA 120
 GATGGTGGCC AGCAGTGCCT GCCTGTNTCT CTGGACTCCT GTGTTCTGGG TGCTGGTGCT 180
 GGCTTTCCAA ACAGAGACAC CGCTCCTGTA ACGACTGGA GCACCAGGCT AAGNACCTNA 240
 CCCCTCGNAC TTNGAAGGAA TGGGCATTNC NGTACTTCAA CATTCTGGGT CTAGGCCTTG 300
 TTGGGGCCAA TTCAAGAAGN GGCCTTGTTN TTNGAAAAA GTGGGCCNNG TTTTNAN 357

SEQ ID NO:2293

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02651

SEQUENCE DESCRIPTION:

GATCCTTCTT TTTGGTTTT GAAATATAAT CATTGTTAAT GTTTCCCTC CAAATAGAAT 60
 ACTGTTTTAT CCATACAAAT CATAACAGCA TCTATCCCAT GCTAGGGTTG GAACTGATA 120
 TTGGATTAC TTGTGTTTT CTTAGTGTG TTTATTTC CAGTTTCATC TNCITTTAAA 180
 AATGAAAATA TGGTGCTTC CCTCCCTCCA GGAAGACTGG CAAATATTNC CTTTATTTA 240
 CTGCTGCTGT GGAGTGATGA GATATGCACT TTACTCTTA AGATTCAGCA AAAAGCTTTT 300
 CACTTCTCAG TATATCCAGA ATACATCATA TCTGGGACTT AGGAAAATTT GCCAN 355

SEQ ID NO:2294

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02652

SEQUENCE DESCRIPTION:

GATCTTTTAC ACCACATCAC AGTGANCACA CTGGGGAGAC GTGCTTTTTT GGNAACTCA 60
 AAGGTGCTAG CTCCTGATT CAAAGAAATA TTTCTCATGT TTGTCATTC TAGTTTATAT 120
 TTNCATTTAA AATCCTTTAG GTTAAGTTTA AGCTTTTAA AAGTTAGTTT TGAGAATTGA 180
 GACACAATAC TAATACTGTA GGAATTGGTG AGGCTTGACT TAAACTTTC TTTGACTGT 240
 GATTTCCTTT TGGGTGTATT TTGCTAAGTG AACCTTGTTA AATNTTNGT TAACTAAATN 300
 TTTTCCTTAA AATAAGACT TTTTCACAAA 330

SEQ ID NO:2295

SEQUENCE LENGTH:352

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02653

SEQUENCE DESCRIPTION:

GATCCTATGG ATTTTCCCGG CTGGTTGCCA CTACTNTACA ACATTCANAG CCCACATCCA 60

EP 0 679 716 A1

5 TCTGTGCCAT TAAGCTTTTT TGAGACATGA GAGATGCCTC TTCCCTGCTG TATGACATGC 120
 ATTTGGGAAG TTGGAAGAA ATGACAAAAT CAGGGAGAAA ACATCCAAGC TTCTTACCTG 180
 TAGATAGAAT CAGCCCTCAC TTGGTGCTTA TTACCAGTTA TTCANGGACA ATAACAACAA 240
 CAAAATTAGT AGACATNCAT GANGCACATN TTTAGGNCCA AAGGNTAGCA TCAACTTGTA 300
 TTTNGAAGGG ACTGTAGTTT TCGGCATTTT ATGGCNATTT TTTATNAAAG TN 352

10 SEQ ID NO:2296
 SEQUENCE LENGTH:351
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02654
 SEQUENCE DESCRIPTION:
 15 GATCGCAGCC GCTTCGCACG CCGCATCACC CAGGCCCAGG AGGAGCTGAG CCCCTGCCTC 60
 ACCCCTGCTG CCCGGGCCAG AGCCTGGGCA CGCCTCAGGA ACCCACCTTT AGCCCCCATC 120
 CCTGCCCTCA CCCAGACCTT GNCCTCCTCC TCTGTCCCTT CGTCCCCAGT NCAGACCACG 180
 CCCTTGAGCC AAGCTGTGGC CACACCTTCC CGCTCGTNTG CTGCTGCAGC GGCTGCCCTG 240
 GACCTCAGTG GGAGGCGTGG CTGAGACCAA CTGGTTTGCC TATAATTAT TAACTATTTA 300
 20 TTTTTCTAA GTGTGGGTTT ATATAAGGAA TAAAGGCTTT TGATTGTAA A 351

25 SEQ ID NO:2297
 SEQUENCE LENGTH:357
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02656
 SEQUENCE DESCRIPTION:
 30 GATCCCCGTT CCTGACATCA CAGCAGCCTC CAACACAAGG CTCCAAGACC TAGGCTCATG 60
 GACGAGATGG GAAGGCACAG GGAGAAGGGA TAACCCTACA CCCAGACCCC AGGCTGGACA 120
 TGCTGACTGT CCTNTCGNGT NCAGCCNGTG GCCTTGGCTT TTCTAGCCTA TTTACCTGCA 180
 GGCTGAGCCA CTNTCTTCCC TTTCCCCAGC ATCACTCCCC AAGGAAGAGC CAATGTTTTN 240
 CACCNATAAT NCTNTCTGCC GANCCCTAGT TCCCTCTGCT CAGCCAAGGT TTGTTATCAG 300
 35 GTTTTCAGGG GCCATGGGTT CACATTAAAG ATTTAAAAGG GTAGTAATTT GGGGAAA 357

40 SEQ ID NO:2298
 SEQUENCE LENGTH:344
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02657
 SEQUENCE DESCRIPTION:
 45 GATCAAATTT NAGTGGCTTT GGACAGAAAA GAAGGCTCTG GATTTAAGCG GGTGGTCACC 60
 TGTGAGACCA GGTCTACCTT GGGACTGTTA TTAACTGAA TCAGTTATTT CCTTGAAATT 120
 TCACAGTAGT GGGTGGGCTT GTTTAAGGC TCTGACAGAT ACCACGAAAC ATGANGCNCG 180
 NNGAACTACA AGACCCCGG GGTCTTTCTG AGTGCAAGGC TGAAATGGAC AAGGGCTCCT 240
 CACGGGGGTG GAGGGAGCCG GAGCCTGCCT TGTGTTCTTT TTTTGACTTG TGACATTTTT 300
 50 CAAACACATA ATTTAAAGGA CTTATGCTCT GCTGTCTCAG GAAA 344

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EP 0 679 716 A1

SEQ ID NO:2299

SEQUENCE LENGTH:462

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02658

SEQUENCE DESCRIPTION:

GATCTGGTCC CTGAGAAACA TATTGTGATG AAGTGGAGGT TTAAATCTTG GCCAGAGGGA 60
 CACTTTGCCA CCATCACCTT GACCTTCATC GACAAGAACG GAGAGACTNA GCTGTGCATG 120
 GANGGTCGAG GCATCCCTGC TCCTGAGGAA GAGCGGACAC GACAGGGCTG GCAGCGGTAC 180
 TACTTTGAGG GCATTAAACA GACCTTTGGC TATGGCGCAC GCTTATTTTA GGGCCAGCGG 240
 CAGGGGACTC CAGCCTGCTG GACACTTCAN GTCCAGCTCT CTCCTGACTG GGGCTTNCGA 300
 CTCACAGGAT TGCATCGNCC CAGCTGCTAA CTTNGGGCCG GGGGCCCNCT CCTTNCACAA 360
 TATACCTTGG GTTTNTGCAT GTTTTCCTNN CTGGGTTGGG GTTCAGAGGG GCAATTCNN 420
 CTTTAAATGG TGTACATATN NCTANATANN CATAATTTTA AA 462

SEQ ID NO:2300

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02659

SEQUENCE DESCRIPTION:

GATCAACTTC CCACAACTG AGGAATGAAT TCCACGAGCC TGTCTGAAA ATNTGGACGT 60
 AAGACAAACA CGTGCTCGTC CTTAATGGA GTTACCAGC ACACTTGTTA ACCAGTCCTG 120
 TTTGCTTTTC TCTTTTTTTG TGCCTAATAA AGTCAACTGA CCAAGTGACC ATGAAAAGGG 180
 GCTGTCTGGG GCTCCTGTTT TTNAGCTGCT GTTCTTCAGC TCCGACCATG TTGCTGTGTG 240
 ATTATCTCAA TTGGNTTAA TTGAGGCAGA AACTGAAGCT CTACCAATGA ACTGTTAGAA 300
 ACAAGACACA CTNTNGTATT AAAATTGCTT GCAGTAACAA A 341

SEQ ID NO:2301

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02660

SEQUENCE DESCRIPTION:

GATCNGTGGC AAAACCAAGT GTGGTCTTTC AGCTTCAGTG TGTTAGCATC CCAGCACCTG 60
 GGATGGGGTT TGTGGGCAAG TTGATTTTGC CACACTGTAG GGCCAGGTN NNCCATTGC 120
 CACCGTGAAG CCAAATNCTA GCCCAAGTCT GGTAGAGCAG TCGGGCAGCT AGTTTCCGG 180
 GGAGGATGAT GTGGTGGGAC AGAGGACCTC AGTGGCCTAT TACGGAGCCC TCTTCCAGA 240
 CTAATTCAT AGCCGAGAGC TCGGGGGGAT GGTAGAGTTA AAATTTAAAA TAATTTTCTA 300
 AATTCTGTAT TTGGATATTA GTGTTAAGT GGTAAATTN 339

SEQ ID NO:2302

SEQUENCE LENGTH:441

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02661

SEQUENCE DESCRIPTION:

5 GATCCAGGGG CTGCCTCTGG CCTCTTAGGG AGCAGAGAGC AGAACTCCGC AGCCCAGCCC 60
 AGAGGAGTGT CACCTCCCAC CTTTGGAGAG GAATCCTTCC CTCCCCTGGA CAAAGTTGCT 120
 GACAAGCCCC TGAAGTGGCC TCTCCATATT CCAGCTGAGC CTGAATCTGA CTCTTGAGGG 180
 TTGGGGCTGC ACTTATTAT TGCGGGGAGA CAGCTCTCTC TCCCACCTNC TCCCAGATG 240
 GGAGGAGAGC CTGAGGCCCA AGCAGGACCC GGGGGTTCCA GCCCCTAGCT GCTCTGGAGT 300
 10 GGGGGAGGTT GGTGGACCAT GGGAGTNCCT GGTGCTGCCC CTNAAGGTGG GACCCAGGCG 360
 TTNTCAAGCT GTACCCITTT NCCGATGGAA TTTGTGTTT TGAANATNNG TGTCTNNTAC 420
 TANTNTTTT AAATAAAAAA N 441

SEQ ID NO:2303

15 SEQUENCE LENGTH:336

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02662

SEQUENCE DESCRIPTION:

20 GATCATGGCA TCCAAGACCA GAGTCTCAGA ACTCATTAAAG AAACAGTTTA CTTGGAATGG 60
 AGAATACCCA TCTGTAATAC AGGTCCTGTC ATTTCATTCA TCTCAAATTA TTTTGAATTC 120
 TTCCCAAATG GCTGCTGGAT TTAGGTGGTA ATAGGGGCTG TGGGCCATAA ATCTGAAGCC 180
 TTGAGGAACC TTGGGTCTGG AGAGCCATGA AGAGGGAAGG AAAAGAGGGC AAGTCCTGAA 240
 25 CCTAACCAAT GACCTGATGG ATTGCTCGAC CAAGNCACAG AAGTGAAGTC TGTGTCTGTG 300
 CACTTTCCAC AGACTGGNGT TTTTGGTNCT GAATAN 336

SEQ ID NO:2304

30 SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02663

SEQUENCE DESCRIPTION:

35 GATCAAGTNA CTTCTGCCCA CCTGGACACA ACACCAAAAA GGCTTCTAAA NACGGGTGTN 60
 AGTCTTTTNA GCAACCCGGT CCAGTACTGG GAGATACAGC CATCCACCTT CANATGTGTC 120
 TACGTGCGCT CTGCCATTCA ACTCGGAAAC TATAAGTAAT TCTNAAGAAA GCCCTCATTT 180
 TTATAACCTG GCAAAATCTT GTTAATGTCA TTGCTAAAAA ATAAATAAAA GCTAGATACT 240
 40 GGNAACCTAA CTGCAATGTG GATGTTTAC CCACATGGCT TTATTATGCA TAANGCCAAT 300
 ATTTCTGTG TTAAGTAATN GCCTTCAATT NNNAAGNTAA TTTTGGCCTG NCCCANAAAT 360
 AAA 363

SEQ ID NO:2305

45 SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02664

SEQUENCE DESCRIPTION:

50 GATCAGAGTT CCTCCTACTT ACAACCCAGG GTGTGAACAT GTNCTCCATT TTCAAGCTGG 60

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EP 0 679 716 A1

AAGAAGTGAG CAGTGTGGA GTGAGGGCTG TAAGGCAGGC CCATTCAGAG CTATGGTGCT 120
TGCTGGTGNC TGCCACCTTC AAGTTCTGGA CCTGGGCATG ACATCCTTTN TTTAATGAT 180
GCCATGGCAA CTTAGAGATT GCATTTTAT TAAAGCATT CTACCAGCA AA 232

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SEQ ID NO:2306
SEQUENCE LENGTH:330
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02665
SEQUENCE DESCRIPTION:

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GATCTTAAGT ATAATTACAA GGAAGAAGTG AAGAAGAATA TTCTCTAGA AGAGAAGGTA 60
AAAAAACTTT CAGAACAATT GGGAGTTGAA TTAAGTAGCC CTGTTGCTGC TTCTGAAGAG 120
TTTGAAGATG AAGAAGAAAG NNCTGTTAAT TTCCCCATTT ACTAAAGGTC ACCTATAAAC 180
TTTGTTCAT TTAAGTATTT ATTAAGTTTA TAAGTTAAAT ATACTTGGAA ATAAGCAGTT 240
CTCCGAACTG TAGTATTTC TTCTCACTAC CTTGGTACCT TTATACTTAG ATTGGAATTC 300
TTAATAAATA GAATTATATG AAATTTTCAN 330

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SEQ ID NO:2307
SEQUENCE LENGTH:328
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02666
SEQUENCE DESCRIPTION:

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GATCGACTTA CTCAACATGA GACAATTCAT ACTGGTGTGA ACCACANAAA TGCAAAGAAT 60
GTGGTAAGGC CTTAGTCAT TGCTATCAAC TTAGTCAACA TCAAAGATTT CACCATGGTG 120
AGAGACTCTT AATGTAATGA GAGGGAAAGC CTTAGCCAT GGAACATTTT TACTGTTGTC 180
ACTATTATNA TGCTATAGTG AAGATTAAAC TAGTTAATAT AGAATATAAA TACTTGGAAG 240
GGCATCTGGC ACATCGTATT TGCTTACTAA ATACATTATT TTTATGATAA TTGTTAGAAT 300
TACTAAAAAT AATCTTATA GAAGGAAA 328

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SEQ ID NO:2308
SEQUENCE LENGTH:327
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02667
SEQUENCE DESCRIPTION:

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GATCTCAGGT ATCAGACCAC TGAGCAACCC ACCGCCAGNC TGCAGGCTTT CAGAGGCCCA 60
CCTGGGCCCA GCGTGGCCTG CCCCAGGGTG GGCTCCAGC GCAACTGCAG GCATCCTCTA 120
GTGGGGCTC TGGAACCCT AGCAGATGGT GGTGACCCC CTGAGATGAG GAAGCTGGTG 180
ACCTNNGACT GAGCAGCAGC CTATGGGCTC CGGGTCAAGT GCTATTCCCA GCGGATGCCC 240
TTCCCTTGC GNCAGTCCCT CCTTTNCTGA GTGTCCAGGC GCNANTGNAA AACAGNAACC 300
CTAGGGTCTG GAACTACTT TTTTNTN 327

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SEQ ID NO:2309
SEQUENCE LENGTH:326

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02668

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SEQUENCE DESCRIPTION:

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GATCCAGTTG TTATAGTGAA CTCATGGTAA TGGTTTGTGA GAACAATAGA GATTTTNATT 60
TCTATGTAGA TGAGTTGGTA TGAGAATATA TGGAAATTTT AAGGGACTGT TAAATCTTT 120
GATTTGTAGA CTATTAAATA TACCGTATGC ATAAAGTAAG CCTTTAGCTC TAAGGTAAAG 180
ACGACACGTT TTCGGTTTGT GACTACAAAT AGGTTAAAA TAGATTTTAA TTTTATTAAA 240
AATATAATTT AATGCAGGTT GTTTGAAGCA TCTGTCTTCA TATGATGGCA TTAGAACACC 300
TTGGTATAAT AAAAAGTTAC CGTAAA 326

SEQ ID NO:2310

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SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02669

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SEQUENCE DESCRIPTION:

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GATCAAGAAG GAGCTAGAGA CCATTTCAAA GAAAAAAAT GCTTTATAGA GTTTAAGTA 60
TGACTTAGAT GGGTCCAGGC AAATAAACTA AAAAGAAGTG AAGGCAACAT GTATCGTCTG 120
GCAGAACTAA ATCTTGAGAGT GGGGTGAGGG ATGAAAGACT ACATATTGGG TACAGTGTAC 180
ACTGCTCGGG TGATGGGTGC GCTAAAGTCG CAGAAATCAC TAAAGAACTC ATCCATGTAA 240
CCAAACACCA CCGTACCCC AAAAACGAAA TAAAAAACA AAACCTTGGG GCCCATTCCC 300
CCTAGGAATG GACTACTGTA AA 322

SEQ ID NO:2311

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SEQUENCE LENGTH:321

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02670

SEQUENCE DESCRIPTION:

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GATCTAAATT ACCTTGGGTT TCGCATATGT CTATGAAATN CTGTGATAAN GTTTTTCAAT 60
ACATTGNTTC ACTGGCGTCT GTTTTCANTT TATACTTTTA ATAACTCATC ACTGGTGGTA 120
CTTTATCTTG AAAAGTAATA TTTTNNATAT TTTANCATTG GACAGTGTGA GCCAGTTGTA 180
ATGATGTATC AGANGTAAAG AAAAACCCAT TAAAGTTATA GCTAATAGAT GCTGTTGGGG 240
GTAAATTA TAGTAAANTA ATCCAATATA GCACTNTNNA TGATTNTTA TATAAANGTC 300
AACTGGTACA TTTCATTGAG N 321

SEQ ID NO:2312

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SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02672

SEQUENCE DESCRIPTION:

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GATCGAAGGG TTTTAGAGA ATGNTTTTCA AAACCATGCC TGGTATTTTC AACCATAAAA 60
GAAGTTTCAG TTGTCCTTAA ATTTGTATAA CGGTTAATT CTGTCTTGT CATTGAGT 120

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ATTTTAAAA AATATGTCGT AGAATTCCTT CGAAAGGCCT TCAGACACAT GCTATGTTCT 180
 GTCTTCCCAA ACCCAGTCTC CTCTCCATTT TAGCCCAAGT TTTCTTTGA GGACCCCTTA 240
 ATCTTGCTTT CTTTGAATT TTTACCCAAT TGGATTGGAA TGCAGAGGTC TCCAAACTGA 300
 TTAAATATTT GAAGGGAAA 319

SEQ ID NO:2313

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02673

SEQUENCE DESCRIPTION:

GATCGACAAA ACTTTGAACG AGGCTGACTG TGCCACCGTC CCGCCAGCCA TTCGCTCCTA 60
 CTGATGAGAC AAGATGTGGT GATGACAGAN TCAGCTTTTG TAATTATGTA TAATAGCTCA 120
 TGCATGTTT CATGTCATAA CTGTNTTCAT ACGCTTCTGC ACTCTGGGGA AGAAGGAGTA 180
 CATTGAAGGG AGATTGGCAC CTAGTGGCTG GGAGCTTGCC AGGAACCCAG TGGCCAGGGA 240
 GCGTGGCACT TACCNGNGGT CCCTTGCTTC ATTCTTGTGA GATGATAAAA CTGGGCACAG 300
 CTCTTAAATA AAATATAAAT GANCAAA 327

SEQ ID NO:2314

SEQUENCE LENGTH:313

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02675

SEQUENCE DESCRIPTION:

GATCAACCAC ATGCACATCC TTACTACAGA ATCCGTCCTT TCATTTCAAC ATTATAGCAA 60
 GCTATGATTT TNATATATAA ATATTATATA AATNANGTAT AANACATTAA AAGTTAACTA 120
 TGTAAGATAT TATNTCTGAA ACAATTTAGC TATATCCACT ATGATTATAA ACTGTGTCTC 180
 GACCTGTGTT ATNTACANAA GCTGCTTAAA AAAGCATTGA GTTAATTTN TTAAATATCA 240
 ACTAAAATAT CATAGTTCTG TGGNNGACAT TGTGTTATAA TGANATAACT GCAACTAGAG 300
 AAANCTGTAT AAN 313

SEQ ID NO:2315

SEQUENCE LENGTH:365

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02676

SEQUENCE DESCRIPTION:

GATCGAGGAC ATAAGGAACT AGTCACAGTG TTGCTGCAAC ATAGAGCTGA CATTAACTGT 60
 NAGGACAATG AAGGCCAAAC AGCTCTACAT TATGCCTCTG CCTGTAAGTT TCTGGATATT 120
 GTAGAGCTGC TGCTCCAGTC TGGTGCTGAC CCCACTCTCC GAGACCAGGA TGGCTGCCTG 180
 CCAGAGGAGG TGACAGGCTG CAAAACAGTT TCTTTGGTGC TGCAGCGGCA CACAAGTGGC 240
 AAGGCTTAAT CAAAAGACTG GAAAAGTGA GTCTGTAATA GCATAAGGCT TCCATTATGA 300
 AAGAAAATA CAGAAATAAT ACTTCTTTTC CACCCGTCTT TGGTATGTAT TGGCTTATAA 360
 AATTN 365

SEQ ID NO:2316

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02677

SEQUENCE DESCRIPTION:

GATCCTGGAG CTGGCTGGCA ACGCGTGGT NACAACAAGA AGACCAGGAT AATCCCCGC 60
 CACCTGCAGC TCGCCATCCG CAACGACGAG GAGTTAAACA AGCTGCTGGG CAAAGTGACC 120
 ATCGCTTAGG GCGGCGTCCT GCCCAACATC CAGGCCGTGC TGCTGCCAA GAAGACGGAG 180
 AGTCAGAAGA CGAAGAGCAA ATNACCCTGA CGCCGNCCTC AGGGAGCTGN CTNCGNCANA 240
 TAAGGCCCTT TTNATGGTCG TCCCGCAATG CTTTGAATG TGCTGGNTGT CATGGAGGGC 300
 CGGTGACN 308

SEQ ID NO:2317

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02678

SEQUENCE DESCRIPTION:

GATCTAGATA ACTCATGACA TTTTATTTGA CCAACATAGC ACATGATGAG ATATCAAGGT 60
 AATTAAAATA GCATGCTTGA AAAAAAATA CGTAATCTGT TTCACCTGTA ACTGTTTAAAG 120
 CCAATAAACT TTTCAAAAT TATGTAATGT GGGGCTTTA TGTAGCACTT TACGTTTCA 180
 TGCTGCTTAT TGTTTATTC TACTGAAAAA AATGANNTTC AAGATTCTCA ACTTTNTTAA 240
 TTTCAAAAT NGTTTATGGT TTTGACTATA GGAATACAAA ANTTCTATT TNGGGNGAAT 300
 AAGAAA 306

SEQ ID NO:2318

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02679

SEQUENCE DESCRIPTION:

GATCCCCTGG CTCCCCAGCA CACATTCCTT TGAAATAAGG TTTCAATATA CATCTACATA 60
 CTATATATAT ATTTGGCAAC TTGTATTTGT GTGTATGTAT ATATATATAT GTTTATGTAT 120
 ATATGTGATT CTGATAAAAT AGACATTGCT ATTCTGTTT TTATATGTAA AAACAAAACA 180
 AGAAAAAATA GAGAATTCTA CATACTAAAT CTCTCTCCTT TTTTAATTTT AATATTTGTN 240
 ATCATTTATT TATTGGTGCT ACTGTTTATC CGTAATAATT GTGGGGAAAA GATATTAACA 300
 TCAAA 305

SEQ ID NO:2319

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02680

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCGAAATC ACTATAATTT TAACCCTNGT GATTGGAATG AATATGGTTT GTGCTGGAAG 60
CTCCGAGGTG GAAGAGACTC GTGCAATGGA GATTCTGGAA GCCCTTTGTT GTGCGAGGGT 120
GTTTTCCGAG GGGTCACTTC CTTTGGCCTT GAAAATAAAT GCGGAGACCC TCGTGGGCCT 180
GGTGTCTATA TTCTTCTCTC AAAGAAACAC CTCAACTGGA TAATTATGAC TATCAAGGGA 240
GCAGTTTAAA TAACCGTTTC CTNTCAITTA CTGTGGCTTC TTAATCTTTT CACAAATAAA 300
ATN 303

10 SEQ ID NO:2320
SEQUENCE LENGTH:302
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02681

15 SEQUENCE DESCRIPTION:
GATCCCTGCT GAATCCACAG GCCAAAATAG TCAATGTAAC TGCAAATCTA ATTTCATCCT 60
CCTTTCCTGA GGCCAACTCA GGAAATNAAA GGACGATTCT AATTTCCACT GCGGTTACTT 120
TTGTGGATGT GTCTGCACCT GCAGAGGCAG GCTTCANAGC TCCACCAGCC ATCAATGCCA 180
GGCTGCCCTT TAACCTCTTC TTCCCGTTTG TTTGACAATG CTCAGATGCA TCAGTTCCTT 240
20 AATATACAG TGAAATTGA AAAGTGTACA TTCGGTGAGA TTAATTTTA TATACAATA 300
AA 302

25 SEQ ID NO:2321
SEQUENCE LENGTH:301
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02682

30 SEQUENCE DESCRIPTION:
GATCCAATTA AAAAAAATTA AAACCAATTT AAAAAAAAAA AGANCACAGG AGATTCCAGT 60
CTACTTGAGT TAGCATAATA CAGAAAGTCCC CTCTACTTNA ACTTTTACAA AAAAGTAACC 120
TGANCTAATC TGATGTNAAC CAATGTATTN ATTTCTGTGG TTCTGTTTCC TTGTNCCAAT 180
TTGACAAAAC CCACTGTTCT TGTATTGTAT TGCCCAGGGG GAGCTATCAC TGTACTTGTA 240
35 GAGTGGTGCT GCTTTAATTC ATAAATCACA ANTAAAGCC AATTAGCTCT ATAACANAA 300
A 301

40 SEQ ID NO:2322
SEQUENCE LENGTH:345
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02684

45 SEQUENCE DESCRIPTION:
GATCAAGCGG AAAGAGTTTA AGTGTCTAAC AAAGTTAAAG CTAAGTGTAGT ACCTAAAAAG 60
TCAGTGTGTT ACATAGCATA AAAACTCTGC AGAGAAGTAT TCCCAATAAG GAAATAGCAT 120
TGAAATGTTA AATACAATTN CTGAAAGTAA TGTTTTTTTN CTATCATCTG GTATACCATT 180
GCTTTATTTT NATAAATNAT TTCCTCATTG CCATTGGAAT AGATATCTCA GATTGTGTAG 240
ATATGCTATT TAAATAATTT ANCAGGAAAT ACTGCCTGTA GAGTTAGTAT TTCTATTNN 300
50 ATATAANGTT TGCACACTGA ATTGAAGAAT TGTTGGTTTT TTCCN 345

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SEQ ID NO:2323

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02685

SEQUENCE DESCRIPTION:

GATCTTTTCT AATATGGTAT TACAATGAAA AGAATAAAGA GAAGATTGA ATTTNCAGTT 60
 TCATTTTCAA AAATATTTA CCAAAACAAA TGGAGAAGAA ACATCCAAA GCACATTCA 120
 TTTCTCCAAA CTGTGTGTTT TAAATTATAG TTATAAATNG TAAGGTAATT TTAAATTGTC 180
 CCTCGTATTA TTNCTCCACG CCTGTTTtag TNTNNGGTCT CCTAAGCTTT TCTCTCATAG 240
 CGTAGACCTA GGAAGGGAT GGAAGATTG CCCAGTCCCC GATGGCTGCG CACACAGGN 299

SEQ ID NO:2324

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02686

SEQUENCE DESCRIPTION:

GATCCCTCTG TACAGGCTGG ATGGAAGGGG CCCTCCACAC TTCCTGGGAG GTCAGAGACA 60
 AACTGTTTCA GAGAGTCAGA TGGACTTCCC AAGACTTGTG GAGAGATGTG ACATGGTTCT 120
 TGGATTTCCT CTGTAGCAGC CTCCTGGACT TCCTGAGGAC TCGACATTGT CCACAGATGT 180
 ACTGGCCATT ACATGAAACA AGAAACCAAG CATCTTTGCT GTTGTTAATT ATTATATGTG 240
 CCATTGTTAC AGGAGATTAT AGGCTAGTCT GTAATAAATT ATCTTATAGC AGCCAAA 297

SEQ ID NO:2325

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02687

SEQUENCE DESCRIPTION:

GATCAGCAGC CGAGAAAAGT ACATCAACAA TCAGCTTGAG AATTTGGTTC AAGAATATCG 60
 TGCAGCTCAA GCCCAGCTGA GTGAGGCAAA GNAGCGATAC CAGCAGGGAA ATGGAGNGT 120
 GACGGAAAGA ACCAGACTCC TCTCTGAGGT TNNGGAAGAA TTAGAAAAGG TAAAACAAGA 180
 AATGGAAGAA AAGGGCAGCA GCATGACTGA TGGTGCTCCT TTGGTGAAGA TTAANCNNNG 240
 CTTNNCANAA CTGAAGCAAG AANCTGTAGN GATGGACATT AGANTTGGCA TTGTGGN 297

SEQ ID NO:2326

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02688

SEQUENCE DESCRIPTION:

GATCCNACTT TAGAAGCCTA CTTTNTAACC AAGGAGCTCA ATTTTTTTTT TAAAGCTTTA 60
 CTAATCTACC ANAGCATTGT AGATATTTTT TTTTAACATC TATTGTTTAA AATAGATNAT 120

TATAACGGGG CAGAGAACTT TNITTTCTCT GCAAGAATGT TACATATTGT ATAGATAAAT 180
 NAGTGNCATT TCATACCATG TATATATAGA GATGTNCTAT AAGTGTGAGA AAGTATATNC 240
 TTTAATAGAT ACTGTAATTA TAAGATATTT TAAATTAAAT ATTTTTTGT AAATAAA 297

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SEQ ID NO:2327

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02689

SEQUENCE DESCRIPTION:

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GATCCTATGT CTGTCTGTCC ACCACGAGAT GGGAGGAGGA GAAAAAGCGG TACGATGCCT 60
 TCCTGACCTC ACCGGCCTCC CCAAGGGTGC CGGCACTCTG GGTGGACTCA CGGCTGCTGG 120
 GCCCCACGTC AAAGGTCAAG TAAGACGTAG GTCAAGTCCT ACGTCGGGGC CCAGACATCC 180
 TGGGGTCCTG GTCTGTNAGA CAGGCTGCCC TAGAGCCCCA CCCAGTCCGG GGGGNTGNN 240
 GAGCAGTTCC AAGACCACN CACCNTTTT TGTAAATNTT GTTCATTNTA ANTCAAATAC 300
 AGCGTNTTTT TCANTTCTGG GAAA 324

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SEQ ID NO:2328

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02690

SEQUENCE DESCRIPTION:

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GATCTGCAGG GGTCTGGGAG TCAGGCCCGG CCTATTGCTT GGGTCTCTCT CTATTTATAT 60
 ATCTAAGTTC ACAGTGTTTC TTATTCCCC TAAGCTTCTA GAGGCTCATG GCCCTGTAGT 120
 TAGGCCTGGC TCATTCTGCA CCTTTCCAGG GAGGTGGAAG GACCCTGTGC CCTCCTTCCC 180
 AATCTTCTTT TTCAGGCTCG CCAAGGCCTA GGACCTATGT TGTAATTTTA CTTTTATTTT 240
 CTAAGTTGT AGTGAAGCTC TCACCCATAA TAAAGTTGT GAATGTTCAA A 291

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SEQ ID NO:2329

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02691

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SEQUENCE DESCRIPTION:

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GATCTAGAAT CTCTTTATGT TCTCCAGAGG AAGGTGGAAG AAACCATGGG CAGGAGTAGG 60
 AATTGAGTGA TAAACAATTG GGCTAATGAA GAAAACTTCT CTTATTGTTC AGTTCATCCA 120
 GATTATAACT TCAATGGGAC ACTTTAGACC ATTAGACAAT TGACACTGGA TTAACAAAT 180
 TCACATAATG CCAAATACAC AATGTATTTA TAGCAACGTA TANTTTGCAA AGATGGNCTT 240
 TANAAGATGC TGTGTAGCTA ANCTGAANTA ATTCATTAC TTATTATTN 290

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SEQ ID NO:2330

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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EP 0 679 716 A1

CLONE:HUMGS02692

SEQUENCE DESCRIPTION:

5 GATCACTCCG CCTTNTCCTG GGCTCCCGTA GCACACTATA ACATCTGCTG AAGTGTGCT 60
GTTGCACCAT ACTTCTTGT ACATTGTGT CTCCCTTCCC AACTAGACTG TAAGTGCCTT 120
GCGGTCAGGG ACTGAATCTT GCCCGTTTAT GTATGCTCCA TGNNGGNCC ATCATCCTGC 180
TTGGNGCAAG TAGGCAGGNG CTCAATAAAT GTTTGTTGCA TGNNGGNAA A 231

SEQ ID NO:2331

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SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02693

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SEQUENCE DESCRIPTION:

20 GATCGCCTAC AAGCCAGCCC CTGGCACCTG CTGCTACATC ATGAAGATAG CTGCAGAGAG 60
CATCCCCAGT CTTGAGGCTC TCAATAGAAA AGNCCACAAC TTCCAGATNG AATGCTCTCT 120
GCAGGCCAAG CCCGCAGTGC CTACGTCTAA GCTGGGCCAG GCAGAGGGGC GAGATGCAGG 180
CTCAGACCCC TCCGGAGGGG ACCCGGNCTT CCTGGGCATG GCCGTGAACA CCCTGTNTGG 240
CGAGGTGCCG CTCTACTACA TCTAGGACGN CTCCGGGTCA TGTGN 285

SEQ ID NO:2332

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SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02694

SEQUENCE DESCRIPTION:

30 GATCTAGAGG TTCCANTGCT ATNCTCTCTT CTTGTCTGAG AGCCAGGACC CTGGGGGAAA 60
TAACGGGCAA AAAAGCACTT TNAAGACAGA TATAGTGGGA ATTNATAAAC GACTTGATAG 120
AAACAGAAAT GAAGTGTCTT ATTNATNCT CTGAGGACTC TGCTCATCAC CCANTAGTAC 180
CAATTTCTTT CTCAGAATGG ATTCTTTCCC CTATCTATCT AATCATTAGA GATGTAGCTA 240
NGAAATTACA TGTATGCATA TGTNTAATAT GTATATGTNT ATGTN 285

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SEQ ID NO:2333

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02695

SEQUENCE DESCRIPTION:

45 GATCTTAAAG CTTTGAGCAC CTGCCATTTT GCCTTGCAATC GTTTCCTCG TCATGCATTT 60
CCACATATCC ACAAACACAG AACGACTTTA GACAAGCACA TGTTACACCT GTGTTGCCAC 120
AAGCAGTCAT TCTTGACGGC TCCAGTTTTT ATTTGACACT TGAGTTTAGT TTTCTCTTTT 180
ATAAACCCAG TGAACCTCTG CACTGGCATT TGGATGTGTG TTAATGCTAT TTGTTTGTG 240
TTAAAAGTAA AACCTTTCTC AGTTTGAATC TGTATTCTCT AAA 283

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SEQ ID NO:2334

SEQUENCE LENGTH:283

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02696

SEQUENCE DESCRIPTION:

GATCTATTAA AAAGGTTAAG AGGCCAGGTT ACCCACCANT CCTGCACTG TNCTGACACT 60
 TTCCCCAGGA GGAACAAG TACAAAGGTT ACGGTGGAGG CATAAGTAGA AGAGATTGTN 120
 AAGAAGGGTA ATTCATGTNT CTTTGCTCTT NCTGCTTTAT GCCTCANTTT GGTITAAAAA 180
 CTTCTNTACT GGCAAATGGT GGTATTCAGT GTGGGATAGT GTCATAACTA ATTTGACAAT 240
 TTATTAATGA TAAAATAACA ATAAATGTCT AGCTTTTACA AAA 283

SEQ ID NO:2335

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02697

SEQUENCE DESCRIPTION:

GATCACAAAA AATCAGTCT TTAAGCATTT GCTTGGTAAG GTTTCCTAAN ATNAGGTTTA 60
 TAATACAACC ATCTGTAATG TATCTNTCGN TTGANCTTGT GGGCCATACA ATTCATTAAAC 120
 TAGATGNATA CATTGTGGAC AGCATCCTCA CTACCCCTCT CTACTCACTC ACAAAGAACC 180
 ATGATACACT GGAATGTTTT TNTNTGGAAT CCTCTTTCTA CTCTTGATT AAAATTTTNC 240
 CCCACTTCAT GATTATATNC AAAATAACA ACTACATCAT AAA 283

SEQ ID NO:2336

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02698

SEQUENCE DESCRIPTION:

GATCAGCTTG CAGAGTCTTG CTTTAGGTT AGATACAAAC AAAGTAAATC ATAGTTGGTG 60
 TAAATCCAGC AAAAAACAGC TGGCTTTGGA ATGGAGAACA CTACAATTCA AATTGGAAGT 120
 ATATTCAGAA GAAACTTTG GAATTAGCTT TACATTTGTT TGTAAATCTA AACAAATNTG 180
 CAAAATTGGT CAAATGTAA GTNTATNGCA TTTTAAAGA TTANTGGTTC CTTTATGTG 240
 CTGATTCTT TGTATTCTGT TCTCTGCATT CATCATTCAG GN 282

SEQ ID NO:2337

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02699

SEQUENCE DESCRIPTION:

GATCTGTACC ACACCTCCG GCCAGCTGTC CTCCTGCTGA TGTCCTCAG TGTCTACAAG 60
 GCCTTTGTTA TGGAGACCTT CGTCCACCTC TGCTCGCTGG GCAGTTGGGC AGCTCTACTG 120
 GCCCGAGCAG TGGTAACGGG GCTGCTGGCC CTCAGCACTT TGGCCCTGTA TGTGCGCGTT 180
 GTCAATGTGC ACTCCTAGGC TTGGTGTCTC AGACATTTGA TGTACCTTTT CCCTGNCTCG 240
 NTCCAGGTTT TTAGTGAAGT AAACAGGTAT TTTGGAAAGT TAAA 284

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SEQ ID NO:2338
SEQUENCE LENGTH:280
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02700
SEQUENCE DESCRIPTION:
GATCAACGAC AGCCTCCAGT TTCCACTTNG TGAGAGAACA AAGGAACCGG GGCATGCTCA 60
NCTATGGCTG CAAGCCNTTC AAGTGAAGCT GGGCACTTAC CCCCTTNATT CCATTCTCCT 120
CAGGATAACA GATTAAAATT CCAGAAGTGT GCACCTGTNG TNTATTCAGG AGATTNTCGT 180
TNTGCATAAA GAGACCACTT GAGGCCCTGT AAGCAAAGAC TAATTNGGTC TNAGTCAAAA 240
TCTTGGGAAT CTGATNAACT AACACACTCA AATGAAACTN 280

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SEQ ID NO:2339
SEQUENCE LENGTH:285
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02701
SEQUENCE DESCRIPTION:
GATCTGGAGC AGGAAGGCCT CGAGGCACAC AGGGGCTGCT GGCCGGCGAG TGGGCCCCAC 60
CCCTCTGGGA GCTGGGCAGC CTCTTCCAGG CCTTCGTGAA GAGGGAGAGC CAGGCTTATG 120
CGTAANTTCA TAGCTTCTNC TGGCCTGGGG TGGACCCAGG ACCCCTGGGG CCTGGGTGCC 180
CTGAGTGGTG GTAAAGTGGG GCAATCCCTT NACGCTCCTT GNCCATGTTT TNAGCGGNCA 240
GNTTGGNTTT NNCCTTNAAT AAATNTGCTT TATTTNCTCT TCAAA 285

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SEQ ID NO:2340
SEQUENCE LENGTH:320
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02702
SEQUENCE DESCRIPTION:
GATCGTAAAC TTGTTGATAA AGAAGATATC GACACTAGCA GCAAAGNAGG CTGTGTCCAA 60
CAGGCTACTG GCTGGAGGAA AGGGACAGGC CTGGNATATG GCCATCCTGG ATTGGCTTCA 120
TCAGAGGAGG CTGAAGGCCG GATGAGGGGC CCCAGTGTG GAGCCTCAGG AAGAACCAGC 180
AAAAGACAGT CCAACGAGAC TTATCGAGAT GCTGTTTCGAA GAGTCATGTT TNCTCGATAT 240
AAAGAACTCG ATTAAGNAAG GNGNCAAGTT CCATGGGATA CAACCTACCT CTTGTTTTGT 300
TTGTCTCTCC TTTTCTTTN 320

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SEQ ID NO:2341
SEQUENCE LENGTH:519
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02703
SEQUENCE DESCRIPTION:
GATCTGAAAG GAGCAAGGAA CAGCAAGGAA TTATTTTCCA GAATGACACC CGCAGCAGAA 60

EP 0 679 716 A1

5 TGTGGAGTG GAAATGATGG CTGGCTATGA AGAGGAGGTC AACGTGTGTG GTCTCCTCAG 120
 TCTCTGTGAG AGGGGTGGGG AGGTGGGAAA CAGGAATCCT CTGCAAAGCC CAATCTGCAG 180
 AGTCGAGACC CTTGGTGCTC TCTGCCCCGC TGCCTGGCAC TGGTCCTTTG CAGCCAGCCA 240
 CCAACGGCCC CCTTGCCCTT NCAGAGGCAG AAGCCTNCGT CTNAACCTGC ACCTCTGACC 300
 GTTNAGCAC CNTTGGGTTN TTACCANGTC CTANAACCTCT GANATTTNTT NGTTCTAAAA 360
 GGGGTTTCTA TTTCAACTTG NTGAGTTTGT NTTTTGGGNC CTTCCAATTT GGGNTACCTT 420
 GNTATNTTN ATGGTTTTAT AAATCCTTNA CTCTTGGNAN GTTTTAATTN TTTACAAAAT 480
 10 CAGGGATAAC TTTNGTTTNA ANACTGGTTT GAAGGAATN 519

SEQ ID NO:2342
 SEQUENCE LENGTH:272
 SEQUENCE TYPE:nucleic acid
 15 TOPOLOGY:linear
 CLONE:HUMGS02704
 SEQUENCE DESCRIPTION:
 GATCCCAACT AATTTTACCG AACCTAAAC CCACAAAGAG GTTGTGTTGT TTATTGTTCA 60
 ATCTTCAGTT GTAAGAGTAA TTCTCTATTT TNATATTGAA ACATAATTAC TTGATAGCTC 120
 20 AGGGTCTACA TTTCAATCAA CTTTTTACAC CAAATTCTGC AGAGTGGTCA AAATGGAATA 180
 TTGGGGGCTG TTGTAACAG AGGCTTAATT TTATTAGAAG TAGCCAGTTA TTTATTAAG 240
 CATGATGTTA ATAAATAGG CATATTCTGA AA 272

25 SEQ ID NO:2343
 SEQUENCE LENGTH:272
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02705
 30 SEQUENCE DESCRIPTION:
 GATCTGACAT GATTCCTTCC TGTCTGAAC TGTGGGGTGT GCACATCTCT ACTTGAGTCA 60
 GGTTTNAGTA GAGGCTTAGA GACAGTTAGG TGAGAACAAC CAAAATCTTA TCATGGTCTC 120
 AGTCANNATC ATTAGGGGGA ACTCTAGCCA AATNGTTTAA CTTCTGCCTG TGGAAGTGGG 180
 35 GATTGGGTGG GCAGGAAAAG GTGATATCCA TTCTTTCTGA TAACTAGATG GTGCTGAGAA 240
 GCTTTTGAAT AAAAATTTG CTAATGAGA AA 272

40 SEQ ID NO:2344
 SEQUENCE LENGTH:273
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02706
 SEQUENCE DESCRIPTION:
 45 GATCTTTCCC AGGCCGCACC ATTTCTNTCA CTCACATGGA CCCAAGATAN AAGAATGGCC 60
 AAACCCTCAC AACCCTGAT GTTTGAAGAG TTCCAAGTTG AAGGGAACA AAGAAGTGT 120
 TGATGGTGCC AGAGAGGGGC TGCTCTCCAG AAAGCTAAAA TTTAATTCT TTTTCCTCT 180
 GAGTTCGTGA CTTCAACCAG CCTACAAGCT GGCACNGCT AACAAATCAG AAATATGACA 240
 50 ATTTAATGAT TAAAGACTGT GATTGCCACC AAA 273

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SEQ ID NO:2345

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02707

SEQUENCE DESCRIPTION:

GATCCATGAA GCTGCCCTGC CCACGCCTCC CCTCCCTGTA GCAACACCTC TGGGTGTTTG 60
 GAGTTTAGCT TTTGTGGGTT TGCTCTCCCT ATCCCATCTC CTGTACTACA CAGTTCATGG 120
 CAGGGTGGGG AGNNGTGGGG TTGGTTCGGG TGGGTGAGGG TCTTTTCCT CTGTGTGCGA 180
 TGTGTGTATC TGACAGNTCT CCGTCCCTAC TGGCCTTTCT CCTCGTCTTC ATATTGTAC 240
 GGTACAAGCA ATAAAGACAC TCATTTCAGA CCAGAAA 277

SEQ ID NO:2346

SEQUENCE LENGTH:431

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02708

SEQUENCE DESCRIPTION:

GATCTTNCTA GGAGGGAGAC ACTGGCCCTT CAAATCGTCC AGCGACCTTC CTCATCCACC 60
 CCATCCNTCC CCANTTCATT GCACTTTNAT TAGCAGCGGA ACAAGGAGTC AGACATTTNA 120
 AGATGGTGGC AGTAGAGGCT ATGGACAGGG CATGCCACGT GGGCTCATAT GGGGCTGGGA 180
 GTAGTTGTTT TTCCTGGCAC TAACGTTGAG CCCCTGGAGG CACTGAAGTG CTTAGTGATC 240
 TTGGAGTATT GGGGTCTGAC CCCAAACACC TTCCAGCTCC TGTAACATAC TGGCCTGGAC 300
 TGTNTTNTCT CGGCTCCCCA TGTNGTCTG GTNNCGGTTT TNTCCACCTA NGA CTG TAAA 360
 CCTCTTCGAG GGCAAGGGAC CACACCCTGT AACTGTTCTG TGNCTTTTAA CAGGTTCTN 420
 CCATTAATGC N 431

SEQ ID NO:2347

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02709

SEQUENCE DESCRIPTION:

GATCTTTTGT GTCTGGTTCC TTTCACGTTG AACGCTATTT TTAAGGTTTCG TGCCTGTTGT 60
 AGACCACAGT CACACACTGC TGTAAGTCTTA CCCCATCCTC ATCCAGCT GCCTCCTCCT 120
 ACTGTTTCCC TCTATCANN NGCCTCCTG GCGCAGGTC CCTGAGCTGT GGGATTCTGC 180
 ACTGGTGCTT TGGATTCCCT GATATGTTCC TTCAAATCCA CTGAGNATTA AATAAACATC 240
 GNTAAAAGAA TGACCTTCCC AAGGNAAA 268

SEQ ID NO:2348

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02710

SEQUENCE DESCRIPTION:

5 GATCAGAAAC CAGTCTCCTT CCCCCTAGTC TGGACTGGGT ATCCCCTCTT AAATNTTTC 60
 AAAGCAACAC AAATTTAATT CCGTCACAGA ACTTGCCACT CTGTGCTGTG TCCTCTGTTT 120
 CCTTGCCATC TTCCTCAATN AGCTGGAAGC CCATTGGCAG CAGGGACTGT TTCTTGTTCA 180
 CAGCTGCACC TCAGTGCTAA GCATAGTGCC TGGTAGGTAA TAGACTCCTT AAGTATTTGT 240
 TGAATTAATA AAGGATGNNT TTTTAAA 268

10 SEQ ID NO:2349
 SEQUENCE LENGTH:268
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02711
 SEQUENCE DESCRIPTION:

15 GATCAGAAGC CATTTNATTT GGTAGGTGTG TCAGAAGGGA GAATGATGN AGACGAAC TG 60
 CTGGAAGAGG TCAGAAGATA GCCATGCTAA AATGCAATTA TATCCTCATG TTTATCCCAA 120
 ACTAATCTTG GACTTTTCCA CTCATTAGCT TTGTNTGCC CTTGTTTCCC TTGAAGGTTT 180
 AAGTTCAACC ATATTCTGTC AACTGTTGAG TTTGAGTGA ATCTTGATT TCTGGTTCAT 240
 20 TATAACAAAC TGTCGCTTA AATCCAAA 268

25 SEQ ID NO:2350
 SEQUENCE LENGTH:398
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02712
 SEQUENCE DESCRIPTION:

30 GATCCGAGAA CGCTCTAAGC CTGTCCACGA GCTCAATAGG GAAGCCTGTA ATGACTACAG 60
 ACTTTGCGAA CGCTACGCCA TGGTTTATGG ATACAATNCT GCCTATAATC GCTACTTCAG 120
 GAAGCGCCGA GGGGCCAAAT NAGACTGAGG GAAGAAAAAA AATCTCTTTT TTTCTGGAGG 180
 CTGGCACCTG ATTTTGTATC CCCCTGTAGC AGCATTACTG AAATACATAG GCTTATATAC 240
 AATGCTTCTT TCCTGTATAT TCTCTTGCTT GGCTGCACCC CTTTTCCNG NCCCCAGATT 300
 35 GNTAAGTAAT NGAAAGTGCA CTGCAGTGAG GGTCAAAGGN GAGGCAACAT ATTNTNNTT 360
 TCCATAATAA AACTTTCTTG GGGGNNATAC TTTTCAA 398

40 SEQ ID NO:2351
 SEQUENCE LENGTH:381
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02713
 SEQUENCE DESCRIPTION:

45 GATCTGCAAG CATTTGCTCT TGTTCACACA TCACCTCTGG GATATTTTCTG CTGTTGTTT 60
 CAAATGGCAA ATCATCAACT AAANGCACTT GTTCAAGTT TTGTTCTGCA CTCCCACGAC 120
 TGAAGTTGTA GATTGAGCTG AATAACCATG GGAAGTGANC AAGCAAAGAC ACTCGATTGG 180
 AGTCAGTTGA ATATTTGTAC CCTCAGTGA GCCCTTCTGG TCTTTCTTC CACTTCTGCA 240
 GAATTTCTC TAGCAAATAC TTCTTTCTCC TTGCTTGCTT CCACCATGAT ATTTGAATAA 300
 50 GAGATGGCCA GAGGATAACA CTGTCTCTT AAAAATAAG CTAAGGAAGGA CCTAGGAACC 360
 TTCAATTGTA GCAGTTGGTT N 381

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5 SEQ ID NO:2352
 SEQUENCE LENGTH:265
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02714
 SEQUENCE DESCRIPTION:
 10 GATCTGCCCG CCTTGGCCTC TCAAAGTGT GGGATTGCAG GCGTGACACG TGCTCCTGGC 60
 TTGAATTTTC TTATAATCCC ATGAAACCAT CATCAGAGTC ACAATAATNA ATTTATCTAA 120
 TCTATCACCT TTGTATTAC CTGGAGCCTT TATAAAGTTT TTNTCTATGC AGACAACCAT 180
 TGATTACTC TGCTGTATAA TACTTTCCAT TTTCTAGAAT TTTCTGACTG ATGTAATAAA 240
 GTGTTTCCTC TTATAATCCC TGAAA 265

15 SEQ ID NO:2353
 SEQUENCE LENGTH:265
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02715
 SEQUENCE DESCRIPTION:
 20 GATCGGGGGC TTGAACCCAG GTGGTCAGGC TCTGGAGCCC ACAATTGTNT TACCCACTAT 60
 GCCCTCTCT AGTCATGGTC CCCAAGAGGG GCTTGGAGAC CCACTTAGCA GGTGAAAGCA 120
 ATGGCAGCCT TCCTATTG ATTATGCACC TAAGAATAAA TGGTATTGG GCATGTATT 180
 25 CCAATATGTG TATATTTATT TATAAATATA TACAGATACT ATNATCTGTA TGTNAGTAAT 240
 AAAGCTTAAA TTATTCCATT TTAAT 265

30 SEQ ID NO:2354
 SEQUENCE LENGTH:379
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02716
 SEQUENCE DESCRIPTION:
 35 GATCGGCGGA CGCCCATCAC CGTGGTGAAG CAAGGCTTTG AGCCTCCCTC CTTTGTGGGC 60
 TGGTTCCTTG GCTGGGATGA TGATTACTGG TCTGTGGACC CCTTGGACAG GGCCATGGCT 120
 GAGCTGGCTG CCTGAGGAGG GGCAGGGCCC ACCCATGTCA CCGGTCAGTG CCTTTTGGAA 180
 CTGTCTTCC CTCAAAGAGG CCTTAGAGCG AGCAGAGCAG CTCTGCTATG AGTGTGTGTG 240
 40 TGTGTGTGTG TTGTTCTTT TTTTNTTTN NNNAGTNTCC AAAAAAGCC CTNAAAAAAT 300
 TCAGGGNCCT TGAATAATTN TNAATAATGC CAGNNTTGG GGAAATNAAA CCCANTAAAA 360
 ACNNTTTGAG GGGTGNAAT 379

45 SEQ ID NO:2355
 SEQUENCE LENGTH:261
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02717
 SEQUENCE DESCRIPTION:
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EP 0 679 716 A1

5 GATCACAAAA CAATTCTAAA ACCTAACTGT TTTTACCATT GAAATTTAAA TTGTGATAAT 60
 AGGTTTAAAA TGTCTAGAAT GCAACTGATA GGCTTTTCTT GAACTGTTAG TTTTGTGAA 120
 GTAGTTTTTT CATGTTTANN NNGTATTTGT AAAAAACAA AAAGCAAAAA AATCCCAAA 180
 ACCCAGATAA CAACCAGAGC AAAACTGTTG TGCCTTCTAT TTATCTTGA TTTCAGTCTT 240
 GGCAATTGTT TAAAAAANA N 261

10 SEQ ID NO:2356
 SEQUENCE LENGTH:259
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02718
 SEQUENCE DESCRIPTION:
 15 GATCATTGGA GAGAGAATTG CACAGAAAGT CCTGAAGTTT AAAACACTTT ATGACCAGCT 60
 TTGGCTCGGG AGAGTGGGGC TGCTTGTAAG ACTGGAAGTG AATAACTTTT TCAAGCAATA 120
 TCAGTGAGTG GGTCCCATCG ACAGGGTTCC AGGACCTGGA ACACCTTAAC AGAAGGAAAT 180
 GCCGAAGCAG CTTGCACAGT NGCTTGACAG ACTTCCAAGN NGGCTGATTC TGGCTTCAAG 240
 ATGGAGCCTT GGAGTTGGN 259

20 SEQ ID NO:2357
 SEQUENCE LENGTH:296
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02719
 SEQUENCE DESCRIPTION:
 25 GATCTGGGAG TACACCAGGC AGCAGCTGCT CTCGNACGGA GATACCAAGC CATGATGTGC 60
 CNNNNTAGT GAACTGCTGC TGCTGTTCAG ACTTTTTTAA AAAAACTAT TTGGACTAAA 120
 30 GAAACAGATT CTGAAATTTA TTGTGATAAT TTGTATTCT TTTTCTTGC AATTAATGC 180
 CAAAAGTTTG CCATGTGCCT TAAACATATT ACTATATATT TNCCTTTTA ATAAACACTT 240
 TTNGTTAAAT TGTATTCTTC CTTAATAAAA ATATTTAAG CAATTGTGGA AATAAA 296

35 SEQ ID NO:2358
 SEQUENCE LENGTH:254
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02721
 40 SEQUENCE DESCRIPTION:
 GATCAGAATA CATGATGGAT GAAATTCCTT ACATGTTTTA GCAGAATNAA TTTGTTTAA 60
 ATAATAAAGT TTGCTACTTA TCTGTATGTA GGTGCTAAA AANGATTTTC TTAACCTAGA 120
 TTTTAAGCCA AATAACCATT TAACACTAGT ATTTGTAAA TGGGTATTT TNCTGTATTT 180
 45 GTATGTTTCA CTATAATAAG GGAATTAAGG ATAATGTGCA TTGAGAATAT TTTGAAAANT 240
 AATTGACTCA AATN 254

50 SEQ ID NO:2359
 SEQUENCE LENGTH:253
 SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS02722

SEQUENCE DESCRIPTION:

5 GATCAGTTAT AAGTAGCAGG CCAAGTCAGG CCCTTATTTT CAAGAACTG AGGAATTTTC 60
 TTTGTGTAGC TTTGCTCTTT GGTAGAAAAG GCTAGGTACA CAGCTCTAGA CACTGCCACA 120
 CAGGGTCTGC AAGGTCTTTG GTTCAGCTAA GCTAGGAATG AAATCCTGCT TCAGTGTATG 180
 GNAATAAATG TATCATAGNA ATGTAACTTT TTGTAAGNCA AAGGTTTTCC TCTTCTATTT 240
 10 TGTAACCTCA AAN 253

SEQ ID NO:2360

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS02723

SEQUENCE DESCRIPTION:

20 GATCAATCCC AAGAATCCAT CAGCAACCTC AGACCAACCC AAGAAGATAA TTAAATCTA 60
 TACTGCTTAT TGGTCAATAT ATTTGGTTCT AGTATTAATA AAGAAAAATG TTATTAAAAAT 120
 AGCATACATA GTAGTAAAT AAANTACANA AAGTGTGTTG ATTTATAGCT GTTTGAGATG 180
 ATAAAGTGN AGCAAAGCCT GTTAAATCAT TGAAGACTT GGANANTTAT TTAAATAAN 240
 CAATTACATG TAN 253

25 SEQ ID NO:2361

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02724

30 SEQUENCE DESCRIPTION:

GATCTGCATA AACAGGGTTC CTGACCTCAC CGAAAAGACT AATGTGCCTT AGAACAAGCA 60
 TTTGTGTGT TTTGTTAGCA CCTGGTTCCA GGACAGACCC TCAGCTTCCC AAGAGGATAC 120
 TGCTGCCAAG AAGTTGCTCT GAAGTCAGTT TCTATCGTTC TGCTCTTGA TTCAAAGCAC 180
 35 TGTTCNTC ACTGGGCCTC CAACCATGTT CCCTTCTCT TAGCACCACA AATAATCAA 240
 ACCCNACATA AA 252

SEQ ID NO:2362

SEQUENCE LENGTH:251

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02725

SEQUENCE DESCRIPTION:

45 GATCTTCTCA GCCAGGAGAA GAGGGTGGTG TTTTCACGCG GGCAACTGCT CGCCGGCCTA 60
 CATGGGGTTA ATTCAAGTCT GCTGCGAGCA CGACTCCGCC CTTGGCACTG GCCTCCAGCA 120
 AGCCCTGTTT TCTTTGGGGT ACAGGGGAAC GGGATGGTTT AGACTTTCCT GCTCAGTGTG 180
 TAAAAATGT AGCTAAAGCC ACTATTTTGG CTCTCCTTAA GCTGTTCAAT AAACCGGTTT 240
 50 CTCATTTTAA A 251

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SEQ ID NO:2363

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02727

SEQUENCE DESCRIPTION:

GATCTGGAAC ACTCCCCTGA CCCCTTCACA CCTGGCCCTC CCTGGGCTTA AAGCTCCTGA 60
TATTCCTCAT CCCCTTCCTT GTTTCCAGA ATCGGTCGAG GTGGACGGTT TGGCCGTAAA 120
GGTGTGGCTA TTAACATGGT GACAGAAGAA GACAAGAGGA CTCTTCGAGA CATTGAGACC 180
TTCTACAACA CCTCCATTGA GGAAATGCCC CTCAATGTTG CTGACCTCAT CTGAGGGGCT 240
GTNCTGCCAC CNAGCCNCAG NCAGGGCTCA ATCTCTGGGG GGCTGAGGGA GCAGCAGGGA 300
GGGGTGGN 308

SEQ ID NO:2364

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02728

SEQUENCE DESCRIPTION:

GATCGTAGAT TTTTAACAAT CTGTATCTTT AACAAATTCTG GGTGCNAGTG TNAGAGTGTG 60
AGCAGGGCTT GCTCCTGCCA ACCACAATTC AATGAATCCC CGACCCCTT ACCCATGCT 120
GTACTTGTGG TTCTCTTTT GTATTTTGCA TCTNACCCCG GGGGGCTGGG ACAGATTGGC 180
AATGGGCCGT CCCCTCTCCC CTTGGTTCTG CACTGTTGCC AATAAAAAGC TCTTAAAAAC 240
GCAAA 245

SEQ ID NO:2365

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02729

SEQUENCE DESCRIPTION:

GATCTAACCA ACTCAACTGA TAGAAAGCTG AATTGTTCCC AGTGGACAAG TGGTATTTGA 60
TGTTTAGCAG GTTTTTTGT TGTTATTTT TTGGTAAACT CTGTGGTAAA ATCTAAAATA 120
ATGTAAAAAC CCTAAAAGTA ACTATTGANT ATNCTGTAAT CTTAGACATG TATTTTCAA 180
GCTAACCTT TGAAGAAATG TGTCAAGGT AGGAAAATAT AAAATTTTTT GGTATTTTGT 240
AAATTTAAA 249

SEQ ID NO:2366

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02730

SEQUENCE DESCRIPTION:

GATCATGCAT TGTGAGGTG GTCTGAATGT TCTGACATTA ACAGTTTTCC ATGAAAACGT 60
TTTATTGTGT TTTAATTTA TTTATTAAGA TGGATTCTCA GATATTTATA TTTAATTTN 120

ATTTTTTCT ACCTTGAGGT CTTTGACAT GTGGAAAGTG AATTTGAATG AAAAATTTAA 180
GCATTGTTTG CTTATTGTTT CAAGACATTG TCAATAAAAG CATTTAAGTT GAATGCGAAA 240

5 SEQ ID NO:2367
SEQUENCE LENGTH:251
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02731
10 SEQUENCE DESCRIPTION:
GATCTATACT GTGTGGTCAT GAGTTGTGTA TAGTTCATA AACTGTATT TTNCTNCTGT 60
CAGTACCCTT AGGATACACT NTAACACACC TTAAGGTCTG ATGTTATGGC AACAACTAC 120
TTNTTCAAAC CTAAATAGGA ACCATGTAAT TNCTCAAAG TGATTGAACA GTTTGCCAC 180
15 ACTTAGTTTG TTGGTCTTAT GTAAACATT GGCTCAAAT AAAGNNCACA CTGATTTATT 240
TNACTGNNA A 251

SEQ ID NO:2368
SEQUENCE LENGTH:239
20 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02732
SEQUENCE DESCRIPTION:
25 GATCTGAAAA TTTATTTTAC CCAGCTTTCA CAATTAAGTC TGTATAAAT GTGGTACCTT 60
TTNGTACCTA TCCAGAGAAA CCTGTACATA TTCAATGTTA TCTAGATGTG ATTGGATAAT 120
GGAGAAAAATN TATTTATAAT GATTTTNCAA TGGCATCAAT AACATTTAAA TGATTTTGAA 180
GAAGTATTAT TTTACTACCC TATAAATGA ATCGAAAATA ATAAAGTTCT TAACATAAA 239

30 SEQ ID NO:2369
SEQUENCE LENGTH:239
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02733
35 SEQUENCE DESCRIPTION:
GATCAAAATTA TCTTCAGCAT GTATATCTGG GGAAAAAGG TCCGAATTTT CACATTTATA 60
TTTAAANTTC AATTTTTTAT ATTTAAANTT CAATTTTTTA GCAACAGCTG AATAGCTTTG 120
CGGAGGAGTT TAATAGTTAC ACATTCATGC TAATATACAT TNCCTTTAAA CATCCACAAA 180
40 TTCTTAAAAA GATTGAATCA GTANATTCA TTTCAGCTAA AAATGGAGTC TAATATATN 239

SEQ ID NO:2370
SEQUENCE LENGTH:237
45 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02734
SEQUENCE DESCRIPTION:
GATCCACCCG CCTTGGCCTC CCAGAGTGCT GTGATTACAG CTGTGAGCCT CCGTGCCCAG 60
50 GCCAGTGTTT TCTCTTAAAT GTGTTTCAAT ATGGTGGACA TTTATTGAGC ACTTGTGTTG 120

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GGCGTTTCAA CAGGAGGCAC TGGTACGAAA AGTAGCTTGT TCTAGTTCAT ATATCATTG 180
CACTTTGCTT AACTTGTATA AGTACTTTTT ACTGTTTAAT AAATATTTTA TTAGAAA 237

SEQ ID NO:2371

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02735

SEQUENCE DESCRIPTION:

GATCAAAAGA GCAAACAATA CTTCTATGG CTTATCAGCA GGAGTGTTTA CCAAAGACAT 60
TGATAAANCC ATAACAATCT CCTCTGCTCT GCAGGCAGGA ACANTNTGGG NGAATTGCTA 120
TGGCGTGGTA AGTNCCCAGT GCCCCTTTGG TGGATTCAAG ATGTCTGGAA ATGGNAGAGA 180
ACTGGGAGAG TACGGTTTCC ATGAATATAC AGNGGTCAAA ACAGTCACAG TGAAAN 236

SEQ ID NO:2372

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02736

SEQUENCE DESCRIPTION:

GATCCNATTC CCGTTGCCTC AAAGCACCAG CTCTCTCGCT CCATCCTCCC AAGAGCCTCC 60
AAGCGGCCAT TGGCTTCCTG GGACTCTGAG TCTGCCGCC TCTTTTCTG ACTCCAGTTT 120
CTTCTGGCCT GAGCCAATGG GGCATGTTCT GTGACTGCAT TTGCATCTCG GATTGTGTTT 180
TTAAACCCAT TTTCTCCCAT ATTTGCCTGA AAAATATATA GAAACTGATA TACAAA 236

SEQ ID NO:2373

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02737

SEQUENCE DESCRIPTION:

GATCAGGCTG GTACAGGATG CCTAAGGTG ATGAGAGGTG AGGGTGCATG AAGAATAATG 60
AGCACAGGGA AGAGAGAAGC AGGACAAAGT AGCAGATAAA ATGCCGGCAA AGCACAGATG 120
ANTGTTTTCA AGAAGCTCTT GTATTTNTNT GCACAGTGTA AATATCCTTG CTATTTCAGG 180
ATGGCGGCTG GCCTGCTCAG TAACATACAT GTTCCAAATA AAGATTTTGC ATGAAAGTAC 240
CTAAA 245

SEQ ID NO:2374

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02738

SEQUENCE DESCRIPTION:

GATCTGACTG CCTCCTTTCT CTGGCCTCTN CCCCTNCCC TCTTCTCTTC AGCTAGGCTA 60
GCTGGTTTGG AGTAGAATGG CAACTAATTC TAATTTAAT TTATTAAATA TTTGGGGTTT 120

TGGTTTTAAA GCCAGAATTA CGGCTAGCAC CTAGCATTTT AGCAGAGGGA CCATTTTAGA 180
 CCAAAATGTA CTGTTAATGG GTTTTTTTTT AAAATTAAAN GATTAAATAA A 231

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SEQ ID NO:2375
 SEQUENCE LENGTH:236
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02739

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SEQUENCE DESCRIPTION:
 GATCCACTGT GAGCACCAAC CTGCTGCAGT CTCTTGGGCC CCTGCTGGCA GCTCTGCCAC 60
 GTCACCGNCT GCCTGGCTCC CACACAGCCA TGCATTGTCA CTCTGCCTCC GGGACCCNAG 120
 CTTNGGAGCN NNTGGGTCTG CCAGGTCCCA CCTCCTCTGT CCCCNATGCC ACAACCTGGG 180
 CTCTGGCTA CAGCAGGGNT CCAGGGACTN CAAATAAATG TTCAGTGACT GGCAAA 236

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SEQ ID NO:2376
 SEQUENCE LENGTH:235
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02740

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SEQUENCE DESCRIPTION:
 GATCGGTCAC ACAAGCTGTT CCACGATAAT TTTGTNTCA NAAGGGGAGN CTGACTACCA 60
 GGACCACTGG CCCCACTTCC AGCCCCTCCA TTCTNAGTAC ACTTCAGAGG GCTCTGGCAG 120
 GGTGAGGGGG TCTTGNCCGT GCCACAGAGA GTAAAGGTCT AGCACACCCA TTGTGGAGAT 180
 ATTCATGGG GACANCCAG TGACTTCACT TTGAAGTAA GTGGGATTTT CCAAA 235

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SEQ ID NO:2377
 SEQUENCE LENGTH:253
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02741

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SEQUENCE DESCRIPTION:
 GATCGNAGGC TACCCTGGCT CAGTNACCAG CTGCTCACTG TGTCCTTCTG TGGTCTCAGG 60
 AGCTGCAGTT GTTGCTGTTG TATGAATAGA CGATAGTNAA TTAGACTGGA TGTGTCTGTA 120
 CTGGCAGTNA TTTTCCAAC NCCTCTGTAT AAGCAATACA TTTGTAAATC ATGGGAATGT 180
 ATTTAATGGT AATTGCCTGT GGTGGTTGTA TCATGATTTA NTNNTATNAT GAGCTTTTGG 240
 CTTTNTNTAT NTN 253

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SEQ ID NO:2378
 SEQUENCE LENGTH:232
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02742

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SEQUENCE DESCRIPTION:
 GATCTGGGGT CCCAGTGTCA TTGGTGAAGG CCTTGGGATT CGAGGCAGCT GAGTCCTCAC 60
 TGACCAAGGA TGCCCTTGTG CTTACTCCAG CTCCTTGTG GAAACCCAGC TCTCCTGTCT 120

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CCCAGTGAAG ACTTGGATGG CAGCCATCAG GGAAGGCTGG GTCCCAGCTG GGAGTATGGG 180
TGTGAGCTCT ATAGACCATC CCTCTCTGCA ATCAATAAAC ACTTGCCTGA AA 232

5 SEQ ID NO:2379
SEQUENCE LENGTH:232
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02743
10 SEQUENCE DESCRIPTION:
GATCTCTGAA AAGNAGGTTT CAGCCACGAG GCAGCTGNTC CCAGGACACT GAGGCCAAGA 60
GAAATGTAAC AGAGCCACAG CTCCACAGGC CTGCACTCGG AGTCTGGGGC CTCTGCAGAG 120
CCAGCAAGGG GAAAAGTATA ATCTGGGGGA CCTTCAACCA CTAAGCCTCT TGTCAAGGCC 180
15 CTCAGGCAGG CAGATGTGTC ACCCAAATAA ACAGTGATAT TGTCTCCAGA AA 232

SEQ ID NO:2380
SEQUENCE LENGTH:232
SEQUENCE TYPE:nucleic acid
20 TOPOLOGY:linear
CLONE:HUMGS02744
SEQUENCE DESCRIPTION:
GATCTNAGCT GGACAGAGGA GGAGGAAGAG GAGGAAGCAA TGGGGGAATA GTGACACCAG 60
25 ACAGTTGATG TCTAGATAGG ACCTCAATNA TTCCNTTAGA ATCTNAGATA CCAGGATATT 120
GTTGGCCATG TGGCATCATT GAGCAGCAGG AGGCTGAAGG AGGNGAGAAC AAAATTGTCC 180
AAACCATGCT GTTTTTTCC CTAAATAAA TCTTGATTTC TTCAGTTTCA AA 232

SEQ ID NO:2381
30 SEQUENCE LENGTH:236
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02745
35 SEQUENCE DESCRIPTION:
GATCTANGGA ACCAAACGGA AGGTTTTGAG GTGATGTAGG TCTTTCACAG TTAGCTTTGG 60
GGAATACAGA ATACTCAAAT AAAGTGCTTT GTTATTATTT CAGAGGGAAT GCGGATTGAA 120
ATGTTACAAC AGAGATTCTT TGGTGGTAGC TATTNNGTA AAGGGTATAT GGNTATTTT 180
40 CTGTACATGT GAAATTATAT AGANNTAAAA GTTATATANA TTACATTGGC CAGAAA 236

SEQ ID NO:2382
SEQUENCE LENGTH:229
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS02746
SEQUENCE DESCRIPTION:
GATCAAGTTT AAGTCAGTCA GTTAAGGGGA GGAGAAGGAG AGGTTATACN TTCAGGGGGC 60
TACCAGACAG TGTCTCAAC TTGGTTAAGG AGGAAGAAAA CCCAGTCAAT GAAATTCAAT 120
50 GAAATTCTTG GAAACTTCCA TTAAGTGTGT AGATTGAGCA GGTAGTAATT GCATGCAGTT 180

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TGTACATTAG TGCATTA AAA GATGAATTAT TGAGTNCCTA AAGATTAAA

229

SEQ ID NO:2383

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02747

SEQUENCE DESCRIPTION:

GATCTGATTT CAGATTTTTC CTGTATCTTT TTTACATACA TCAGAAAAAG AAATGTTTAC 60

TATATTTTGG GTTCCATTNA TGATTGTTTT AAGCATTTGA CGNATAAGGA AAAC TAACAA 120

TTAANTCAAT TAGAAAAGCA ACATAAAATT AANTGATATT TAGGAAATCA GTTATATGTG 180

AGCTTGGGTA TTCAAATGTC ACAANTAAAA GGCNTANACC CATNAAA 227

SEQ ID NO:2384

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02749

SEQUENCE DESCRIPTION:

GATCAAATNA CCTGTGAAGG AATATTTTGC CTTATCCTA GCTGCTGGGG AAGCGGGGAG 60

AGGGGTCAGG NAGGCTAATG GTTGCTTTCC TGAATGTTTC TGGGGTACCA ATACGAGTNC 120

CCATAGGGNC TGCTCCCTCA AAAAGGGAGG GGACAGATGG GNAGCTTTTN TNACCTATTC 180

AAGGAATACG TGCCTTTTCC TTAAANNCTT TCATTGATTG AAA 223

SEQ ID NO:2385

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02750

SEQUENCE DESCRIPTION:

GATCAGGGTT TNGGGTCTGT GTTCTTTCTA CCGTCAGCAC CTGTGTGGTC AATTCTGGAC 60

ACTTCCCAGA GAAGTCTTTG AGTAGAGAAT CCTACTCAA TTTCACTGTA TATNTTAAGC 120

ATTCTCTCC TTTCCNTTG CCTNCCCTGT TGCCTTNTCT TCCCTGATT TCTCCTCTGG 180

TCATCTNCTC TCCCTNCTGC GTGTAAGCCA TGGGAAAGGG N 221

SEQ ID NO:2386

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02751

SEQUENCE DESCRIPTION:

GATCATGAAA ACAATGTAGG TAAAGTAAAG TATGTATTTG TCTGTGCTTG AAAAATATTG 60

TAAAAATGTTA TGTATTTGGA ATATATTTTG TGGTTTGTCT AATATTTATA AACACAAC TC 120

GGGGTGAATT CACANTGAGT TTATTTTCATT GAAATACTAG AGATATGGGG GCCATGTTAC 180

TGTGCTTGGN GCCTTACCNT TTGTATAGTG AAATTTGCAN 220

SEQ ID NO:2387

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02752

SEQUENCE DESCRIPTION:

GATCCGCCTG CCTTGGCCTC CCGAAGTGCT GGAATTACAG GCATGAGCCA CTGCTCCTGG 60
 CCTAAGATGT TTTTAAATA ATGTTTTTAA CTAAATTTTA AGAATGTTTT TAACTAAAGT 120
 TATTTATATT TGGATAAATT CGTTAATGAT TTGTGTCATT TCCCAACCC CTTTTAAAT 180
 TTGTGAATTG GAGGACTGGA TTTAAAGATA AAAAGTTAAA 220

SEQ ID NO:2388

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02753

SEQUENCE DESCRIPTION:

GATCTAATTA ATAGCTGACC TCCCAATCT GACAGGATAG AACTGCCAC GTGCAAGGCC 60
 TGCCAGCCCC TCAGACGCAC AAAATGCGTA AAACAAATGC ATCCTTTCCT GGCTAAGCGA 120
 GTATTACTCT CTTAGCCCTG CACCAAACCT CCAATCTAGC CACATTTAAC TTTTCATTTC 180
 TTAGACCCGC AGAGTGTCTT CCTGCCTCTG AGCTGTGAGT GTTGTTCCTT TTGCCCGGGA 240
 TGCTCTGTT TTTAATACCA GTTCAAGTCC CACTCTCTCA GTGAAGCACT CCCTTCCCCA 300
 CTNATAGCCT TTAGTGAACC CTCGTTTCTT GCTTCTTN 339

SEQ ID NO:2389

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02754

SEQUENCE DESCRIPTION:

GATCCATGTG CAGTAATGCC TGGTGGCTCC AGGTCTGCCC CGCCGTCCTG TGGGGCTGTG 60
 AGCTTTCCCA GCCTCCTGCC CGTGTGTTGTG AATATCATTC TGTCTCAGC TGCATTTCCA 120
 GCCCAGGCTG TTTGGCGCTG CCCAGGAATG GTATNAATTC CCCTGTTTCT CTTGTAGCCA 180
 GTTACTAGAA TAAATCATC TACTTTAAAA TCTTCAAA 219

SEQ ID NO:2390

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02755

SEQUENCE DESCRIPTION:

GATCTTGACC GGGAAAAGGG ACTTGAGAGA ACCTTCTAGG ATAATTTNAT TTCCTGATTA 60
 GGTGGTGGTT ACATTTGTAA AAATCATCGA CCTCTAAATT TAGGGTTTGT GCCCTTCA 120
 TACCTTGTG TATGCATTTT GCCACTTGT TTTCAAAGC AATGAAAAG TATCACTGCA 180

ATTAGGTTTT AAATAAATTT GTTTCGTAA CATGTCAA

219

SEQ ID NO:2391

SEQUENCE LENGTH:218

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02756

SEQUENCE DESCRIPTION:

GATCTGGAAT CGGGGTACAG GGGGCTACAG TCCTTCCAGG GGCTNTGGGG CAGCTCCCAG 60
 CCTCTTCCCA TGCTGGTGGC CACCGTGTCC CTTGCTGCGG CTGCATCTTC CAGTCTCTCC 120
 TCCGTCTTCC AGTGGCCGCT CTCTTTATAA GAACCCTGGT CATTGAATTT AAGGCCACC 180
 CCAAGTCCAG AATGACCTCG CAAGACCCTT AACTCAA 218

SEQ ID NO:2392

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02758

SEQUENCE DESCRIPTION:

GATCCATTTT TAATGGTTCA TTTCCTTTAT GGTCATATAA CTGCACAGCT GAAGATGAAA 60
 GGGGAAAATA AATGAAAATT TTAATTTTCG ATGCCAATGA TACATTGCAC TAAACTGATG 120
 GAAGAAGTTA TCCAAAGTAC TGTATAACAT CTTGTTTATT ATTTAATGTT TTCTAAAATA 180
 AAAAATGTGA GTGGTTTTC AAATGGCCTA ATAAAAAN 217

SEQ ID NO:2393

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02760

SEQUENCE DESCRIPTION:

GATCAGAGGA ACTTTNAGGT GTCTGCCGGC TAACATTGTG TCATTCCTGG AGTCCACAGT 60
 ACACGTCCCC TGCCTCAACA GGCACAGCTC TCACAAAGCT CTTCAAGCAT GGAAGTGGGA 120
 GTTGTGTTGT ACTTCATGGC ACTCTGATGC CTGCTGTCTC AGTGTGTTGGT TATTATGCAA 180
 ACAAGTAATG TTTGAAATAT ATAATAGCAC TGAAAA 216

SEQ ID NO:2394

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02761

SEQUENCE DESCRIPTION:

GATCCATTTC TACCTGCATT TCCCAGAGGA CTAGCAGGAG GCAGCCTTGA GAAACCGGCA 60
 GTTCCCAAGC CAGCGCCTGG CTGTTCTCTC ATTGTCACTG CCCTCTCCCC AACCTCTCCT 120
 CTAACCCACT AGAGATTGCC TGTGNCCTGC CTCTTGCTC TTGTAGAATG CAGCTCTGGC 180
 CCTCAATAAA TACTTCCTGC ATTCNNCTGN NAAAA 215

EP 0 679 716 A1

SEQ ID NO:2395
 SEQUENCE LENGTH:214
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02762
 SEQUENCE DESCRIPTION:
 GATCTAAATG TAAAGCAAA TGA AAAATGC ATGNTTTTT NCCTGTCAA CATGTATACC 60
 CTTATGTATA GAGACCAGTA GTCACGTATG GTGACTGAAA CAGGATTATG TAATCCCTAA 120
 AAAGCAGAAT ATGTAAAANT CACATGTATG CGTTTGGTTT AGGAATGTNC TTTTGTACTT 180
 CCACTTGAAT AAAGGTGTGT TTGGTATTCT GAAA 214

SEQ ID NO:2396
 SEQUENCE LENGTH:212
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02764
 SEQUENCE DESCRIPTION:
 GATCCAGAAA TTCAA ACTTC GAGAGCAGAT GGAACGACAT CTAAATCTNT GAATAAAGCA 60
 GCAGGCCTGT CTTGGCCGGT TGGCTTGACT CTCTCCTGTC AGAATGCAAC CTGGCTTTAT 120
 GCACCTAGAT GTCCCCAGCA CCCAGTTCTG AGCCAGGCAC ATCAAATGTC AAGGAATTGA 180
 CTGAACGAAC TAAGAGCTCC TGGATGGGTC CN 212

SEQ ID NO:2397
 SEQUENCE LENGTH:212
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02765
 SEQUENCE DESCRIPTION:
 GATCTATTAA AGTGTCAACT TTGCATTATA GAACTGAACA TGAAGTAAAT TGAGTGTTTC 60
 TGAGTTTNC ATAGAAAATT TATGCTACCT CTCATCTTTT CACATACAAA TAAGCAACTT 120
 TTAATGAAGG CTTAGGGTGN AAATTTTAAT TTTAGCACTT TACATTACAT GATGAATGGT 180
 GAATATTAAA GGACTTTGAA CATTTTAATA AA 212

SEQ ID NO:2398
 SEQUENCE LENGTH:213
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02767
 SEQUENCE DESCRIPTION:
 GATCGAGAAG CTGCTCAATT ATGCACCCCT GGAGAAGTGA CCACGCTGAA ACCCACCAC 60
 CCGCTGTGCT GACCATGGGC CCTGAGCGTC CTACCCCGAA TTCACGAGGC TGAGGCATCC 120
 GGGAGCTGGC GTAATGCCTG GCCGCAGTGT GTGTGTATCC CATACCCAC TCTGGAAGGA 180
 ACCATCCAGT AAAGGTCTTT CAGAACCAC AAA 213

SEQ ID NO:2399

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02768

SEQUENCE DESCRIPTION:

GATCAGAGAT GCACCACCAA GCCAAGGGAA CCTGTGTCCG GTATTCGATA CTGCGACTTT 60
 CTGCCTGGAG TGTATGACTG CACATGACTC GGGGGTGGGG AAAGGGGTCG GCTGACCATG 120
 CTCATCTGCT GGTCCGTGGG ACGGTGCCCA AAGCCAGAGG CTGGGTTCAT TTGTGTAACG 180
 ACAATAAACG GTACTTGTC A TTTCTGGGCAA A 211

SEQ ID NO:2400

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02769

SEQUENCE DESCRIPTION:

GATCAGACAC CCCTTCACGT GTATCCCCAC ACAAATGCAA GCTCACCAAG GTCCCCCTCTC 60
 AGTCCCCCTT CCTACACCCT GACCTGGCCA CTGCCGNACA CCCACCCAGA GCACGCCACC 120
 CGCCATGGGA GTGTGCTCAG GAGTCGCGGG CAGCGTGGAC ATCTGTCCCA GAGGGGGCAG 180
 AATCTCCAAT AGAGGACTGA GNACTGCTAA A 211

SEQ ID NO:2401

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02770

SEQUENCE DESCRIPTION:

GATCACCTAC TTACTGTATT CTACATTATT ATATGNCATA GTATAATGAG ACAATATCAA 60
 AAGTAAACAT GTAATGACAA TACATACTAA CATTCTTGTA GGAGTGGTTA GAGAAGCTGA 120
 TGCCTNGNTT CTACATTCTG TCATTAGCTA TTATCNTCTA ACGGTTCAGT GTATCCTTAC 180
 AGGAATAAAA GCAGCATNTG GNTAAA 206

SEQ ID NO:2402

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02771

SEQUENCE DESCRIPTION:

GATCGAATGA AGGATTCAAA ATTAACCACT CCAAGGGGGG ATTGAAGGAA GAACCACTCT 60
 TAATGGACAA AAAGAAAGAA AGGGGAGGGA GTAACAGGGA TATNAGCTCT AGCCGCCCAA 120
 GCTAGCAATG GCAACCCTTC TGGGTCCCCT TCCAGCATGT GGAAGCTTTC CTTTCGCTTC 180
 ATTCAATAAA CAGCTGCTGC TCAAA 205

SEQ ID NO:2403

SEQUENCE LENGTH:228

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02772

SEQUENCE DESCRIPTION:

GATCTATAGA CATNAGGAAG GGAGTNAGAC GGCTCCTCCA CCATCCTCAG CCAGTGCAAC 60
 CCATTCCCTC TNCCTCTCTC TCTCTCTCTC TCTCTCCCTC CCTCTCCTTC CCTACCTCT 120
 CACCATCTTT NTTGGCCTCT CTNAGGGTCT CTCTGTGCAT CTNTTTAGGA ATCTNGCTCT 180
 CACTCTCTAC GTAGCCACTC TCCTTCCCN ATTTNTGNGT CCACCCNN 228

SEQ ID NO:2404

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02773

SEQUENCE DESCRIPTION:

GATCTAGCTA GGGCTTTGTC TTTTCATCTT TGTGCATAAC TTACCTGTTA CCAGTATAGG 60
 TGGGATATAC ATNTATCTTG CAGGAAATTC CCCAAAGTC AGAGTCCAGT TCCTTCCATA 120
 AAACAGGCTG GACAAATGAC CACTATGTTA GACCCCCCGG NTCGACTTCA GGGGTGAGTG 180
 TTCCTGTCCC AAACCCNCAC ACAGAATNCT CTGNCCTGNGG TTCATGTNGA AACTGAGCAA 240
 AAACANAGT ATCTNTCAAN ANGTGTAACN TGN 273

SEQ ID NO:2405

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02774

SEQUENCE DESCRIPTION:

GATCCACCTC ATATGTGAGT CCGTCCAAAA GATGTTACTG CTCTGGGTGG GCCAGTGTTT 60
 TATATCGGTT ATACTAACTT TCATTTAAAG TATTTATTCT AAAATGCCTC TGAGAAACAG 120
 TAAAAAATAA AAACAACAAG TTGTCTAAAA TGCAACAGCT TTTATAGTAA ATGTACATTT 180
 ATAAATAAAA TACTCAAATC AAA 203

SEQ ID NO:2406

SEQUENCE LENGTH:203

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02775

SEQUENCE DESCRIPTION:

GATCTCTGAT GGATTTGTTG ACTCCTCTGT GGGAGAAAGG CTTGGTCTAC TGCAGGTGTT 60
 AACGCTAAGC CAGGCTGGAG CTGCGGACGT NAGTTTCCTC AGCNCCTCGC TGTCGCTTC 120
 GAACGTNACC TCGACGTCTG CTCTCCCTT CCCTTTAGCT GACAATGTGA CAGTNCTTGA 180
 ATAAAAGTNA GTCTGACAGG AAA 203

SEQ ID NO:2407

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02776

SEQUENCE DESCRIPTION:

GATCTGAATG TGAATTTCTA ATTGTATCAG ACGTTAATGT TTTAAAGCTA TAACAAAAGTT 60
TAAAAATTCT ACTTTTGTGTT TTTNATTTAT TTAACTGTT CTTTATCTA TTAAATTGTT 120
GTATGTGGAT GGGGAAGTTT TGTTTCTCCT CTTAGCATTT GTTCTATAA CCAGAAATAA 180
AATTCTATAT TAAAGAAATG ACAA 205

SEQ ID NO:2408

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02777

SEQUENCE DESCRIPTION:

GATCCCAATC TGAGAAAAGG CAAAAGAAATG GCTACTTTTT TCTATGCTGG NGTATTTTCT 60
AATAATCCTG CTTGACCCTT ATCTGACCTC TTTGGAAACT ATAACATAGC TGTCACAGTA 120
TAGTCACAAT CCACAAATGA TGCAGGTGCA AATGGTTTAT AGCCCTGTGA AGTTCTTAAA 180
GTTTAGAGGC TAACTTACAG N 201

SEQ ID NO:2409

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02778

SEQUENCE DESCRIPTION:

GATCTTTAAC TGCCTGCTGA TAAGATATTG GGCCAACCTGA AAATAGAAAT TGTTCTTTCT 60
TAGAAATATT TTAATGCTAA CTTGTAGTTT TTCCTCAGAA AGCTAGTATT TGAAGCCATT 120
CGAGTTTAAG ATNCTCTAAT TTCAATAAAA TAGCTTCCAA ATATTTAAAA TGTAATAAAA 180
TATATGTTTG AACTCTAAA 200

SEQ ID NO:2410

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02779

SEQUENCE DESCRIPTION:

GATCAAAACG CTCCATCTTT TTACAGTGGC ATAGGAAGAC GGCAAAAATT TCCTAAAGTG 60
CAATAGATTT TCAAGTGTAT TGTGCCCTGT TCTAAAACTT TTATTAAGTA GGTGCACTTG 120
ACAGTATTGA GGTCANNNNN TATGGTGCTA TTTCANTNAG TCTAGGTTTA GGCCCTTGTA 180
CATNTTGCCC ATAACCTNN 198

SEQ ID NO:2411

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02780

SEQUENCE DESCRIPTION:

GATCTGCCCA TTGCTGAAAC TTCAGTACTT AAGTCCCCTA TTATNATTGT ATGGCAATCT 60
ATCTGTCCAC TCAGAAGTTA TTATATTTGT TTTATATGAT TGAGCACTTC TGTITGGGT 120
ATATATGTAT TTACAATNAC TATAACCTCT TGCTGAATTA ACCCCTNTTA CCATTATGTA 180
ATAAACTTAT TTCCCAA 198

SEQ ID NO:2412

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02781

SEQUENCE DESCRIPTION:

GATCTTGAAT CACTTGACAG TGTTGTGTTNG AATTGTGTIN GTTTTNCCT TTGATGGGCT 60
TAAAAGAAAT NATCCAAAGG GAGAAAGAGC AGTATGCCAC TTCTTAAAC AGAACAAAAC 120
AAAAAAGAA AATTGGGCTC TTTCTAATC CAAAGGTAT ATTNACGCA TGCTTGACTT 180
TACCAATNCT GATGACAN 198

SEQ ID NO:2413

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02782

SEQUENCE DESCRIPTION:

GATCCAAAGT AACTAAACAG GAGCCACAA GACGGTCTGC CAGATTGTCA GCGAAACCTG 60
CTCCACCAA ACCTGAACCC AAACCAAGAA AAACATCTGC TAAGAAAGAA CCTGGAGCAA 120
AGATTAGCAG AGGTGCTAAA GGAAGAAGG AGGAAAAGCA GGAAGCTGGA AAGGANGGCA 180
CAGAAAACCTG NTTCTGTAGA TAACGTGGGA GAATGANTTG TCATGAAAAT TTGGTGGTTG 240
ATTTTTTGT NTGTCTTGGG ACAACTTTTA AANGCTATTT TTNCCANGTN TTTTNGTNN 300
TTGGTTTTTT TTTAGGGNT CTNCTTGTTG GCATNCGGNA GTTTTTTANG GTTTGGNCN 359

SEQ ID NO:2414

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02783

SEQUENCE DESCRIPTION:

GATCCAGGG GTGCACATGG GCCCCTGGG TGTCTGAACA GAAGGGCATG GNAGGAAGGG 60
CTGCACCCCT GCAGTCTTAC TCTGCTGGTG TAGCGGGCAG CTGCCCACTC CCACCCACC 120
CTGCACCGCG GGCTCCTNAG TCGGCAGATT AAGCATTTNA TAAATTGTAT TTAAATACA 180
TGTTTTAAAC TTGTCAA 198

SEQ ID NO:2415

EP 0 679 716 A1

SEQUENCE LENGTH:167
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02785
 SEQUENCE DESCRIPTION:
 GATCCCATCC ATCAGCTCCC TTTTCTTTT CCCTTGAAC GTTCTGGCCT CAGACCAACT 60
 CTCTCCNNNN NTAATCTCTC TCCTGTATAA CCCACCTTG CCAAGCTTTC TTCTACAACC 120
 AGAGCCCCC ACAATGATGA TTAAACACCT GACACATCTT GCANAAA 167

SEQ ID NO:2416
 SEQUENCE LENGTH:196
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02786
 SEQUENCE DESCRIPTION:
 GATCTGTGAT TGGNTGGTTA ATGGGAAACG GTTTTTNCT TTGGCTGCAG GTGTTCTGCT 60
 GATATCAACA GCTTCCCTAT TTTNAATGCA GAAAACAGGG TCTGGGACAT TAGTCGTTAT 120
 ATTNACTTG AAAAGAAAGA AACCAAGTGC GCTTTGCAAT ATTTATTACA CAAAGAACTT 180
 GCTGCTGCAT TCTAAA 196

SEQ ID NO:2417
 SEQUENCE LENGTH:194
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02787
 SEQUENCE DESCRIPTION:
 GATCACAGAT TTCCCTGCCA GGGTGTCTGT GGTATCAGC TGCAGGCTCA GCTNGGGTCG 60
 GCCGNTTCAC ACAAGCCACT CTGTACCAG TGCCCTACCT TAGTGACGGG AGTAAGGAGC 120
 TTCCTTCCCC TCCATGTCACT TCCTNCCTGT TCCNTNCATT CCCCACAGC AAATAAACT 180
 GTTGAATGCT CAAA 194

SEQ ID NO:2418
 SEQUENCE LENGTH:193
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02788
 SEQUENCE DESCRIPTION:
 GATCTTCCTA CGCACAACAC AAACGTCAGT TAATGTCCA TCCATGCTGC TTAAAGAGCA 60
 TTCCTGTCCT AGTAAATGG GCAAGTCCCT CTACCCCCA CCCTCACCTG GTATGCTTAC 120
 ATTAATAGCT AAAGTCAATC CTGTAATGAA ATAAAGCAAG TGGTAGCTGT CTGGTAGCCT 180
 CCACTACTGC AAA 193

SEQ ID NO:2419
 SEQUENCE LENGTH:193
 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02789

SEQUENCE DESCRIPTION:

5 GATCAAAACC CAGCAGAGTG CAAGCAGCAG TGAAGCAGGA TGTATGTGGA CTTGAGGATA 60
 ACCTGCACTG GTCTACCTTC TGCTTCCCTG GAAAGGATGA ATTTACATCA TTTGACAAGC 120
 CTATTTTCAA GTTATTTGTT GTTTGTTTGC TTGTTTTNT TTTTGCAGCT AAAATAAAAA 180
 TTTCAAATAC AAA 193

10 SEQ ID NO:2420

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15 CLONE:HUMGS02790

SEQUENCE DESCRIPTION:

GATCAGACCT CAATAATTTT ATACTGTAAT AAGCTCTTG AATGNTATA TTATTATTTT 60
 TNACAATCAT TTCATTTTGT ATTTAATATC AATGGACTGA GTCTGATTCA GAAAAATAATT 120
 GTAATGTTCA TATTCAATAT CTTACAGTGA TACAGTTTG TATTACATA TAAATATACC 180
 20 GACATGACCA AA 192

SEQ ID NO:2421

SEQUENCE LENGTH:276

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02791

SEQUENCE DESCRIPTION:

GATCAGGGTT TCAAGAATGA CTGCAGTGGG TTTTGAAAC AGACTTATCA TTATTGATTT 60
 30 GAGGTTTCCC AGAGATATAG TTCACAGTTA ATTGTGCGC TCTAATACAA CTGACCATT 120
 AAAATTGAAC AAGTTTATTG TTTTGTAACA ATGTCAGTTG TTAAACCTTG NCATTTCAAT 180
 TAAACATGA NTTGTAGTTA TAACTCANTG CAANTNCAAC AGTTGTATTT GGNGTTAANT 240
 TATTTTCACA CGTNNCTTN TTTCATGGAN NNCCCN 276

35 SEQ ID NO:2422

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS02792

SEQUENCE DESCRIPTION:

GATCTTTTAT TTTCTCATTA TTTATAACTT CAGACTTGGG CCCCCTGTTT TTTCTTTCCC 60
 ATTAACCTGA GTGACCTGTG TGAGAGACAG ACAGATGCCC CACGAGGATG GCTGGACAAG 120
 45 GACTTTTACT TTTTATTACA TAAAAATATT AAAAAATAAA TAAAAAAAAT AAAATTTTAA 180
 ACTAACTTAA A 191

SEQ ID NO:2423

SEQUENCE LENGTH:189

50 SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

5 TOPOLOGY:linear
 CLONE:HUMGS02793
 SEQUENCE DESCRIPTION:
 GATCGGAATG CGGGGTCGAG AGCTGATGGG CGGCATTGGG AAAACCATGA TGCAGAGTGG 60
 CGGCACCTTT GGCACATTCA TGGCCATTGG GATGGGCATC CGATGCTAAC CATGGTTGCC 120
 AACTACATCT GTCCCTNCCC ATCAATCCCA GCCCATGTAC TAATAAAAGA AAGTCTTTGA 180
 GTAGTCAAA 189

10 SEQ ID NO:2424
 SEQUENCE LENGTH:187
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS02794
 SEQUENCE DESCRIPTION:
 GATCGAGACC ATCCTGGCTA AAACGCCTGG AATGCAGTGG CACAATCACT GCTCACTGCA 60
 GCCTTGACCG TNTGGACTCA AGTAATTCTC TCACTTCAAC CTCCAAGTA GCTGGGACTA 120
 CAGTCATGCA CCATCATGCC TATAAGATA ATTTAATTTA TAATAAATNA TTTATACAAA 180
 20 CAATAAA 187

25 SEQ ID NO:2425
 SEQUENCE LENGTH:187
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02795
 SEQUENCE DESCRIPTION:
 GATCAATCGT GCATCCTNAG TGAACTTCTG TTGTCCTCAA GCATGGTCTN NNTACTTGTG 60
 30 AACTATGGTG TTCAGTTTGT CCTCTGTTAG AAATTCACAC TGTTGTTGTA ATNATGTGGA 120
 ACTCCTCTAA AANTTACAGT ATTGTCTGTG AAGGTATCTA TACTAATAAA AAAGCATGTG 180
 TAGNAAA 187

35 SEQ ID NO:2426
 SEQUENCE LENGTH:185
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02796
 40 SEQUENCE DESCRIPTION:
 GATCNCGTTT TNAACCCGNT CCTGCCCCAC CTGCCCTATA GTTATGGCCT GTGTTCTGCT 60
 CTCCTGGTCC CAGTGCACCG TCTGCTCTGT GAACTCCTCC CACCAGGCCC TTCTTACCCC 120
 ACGCGTGTCT GTCCCCNTCG TTCTGTAGCG GGNGGTACAT AATAAAACAA TGGNGTGGNG 180
 45 ACAAA 185

50 SEQ ID NO:2427
 SEQUENCE LENGTH:181
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS02797

SEQUENCE DESCRIPTION:

5 GATCTATGTT TTCTGAAAAT AATTGGTTAA TGGAAGTTAT CTAATATATT TNAAGTGTTC 60
 CTGTTAAAAA CAATAGGCTT CAAGATGACA TAACACCAAA TCAAAAATNA CCAAAGGAAT 120
 CATTTTGTTC GTTAGATTG TAATTTAGCA TCATTGGCAA TAAATCTACT CAAACGTTAA 180
 A 181

SEQ ID NO:2428

10 SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02798

15 SEQUENCE DESCRIPTION:

GATCCCAAAG GGGTTGGAGG CAGGGAATAT TTGAAAATTC AGACTGGAAT TCCAGGCCAA 60
 AAGCTCAAGA CCACGAGCTT CTCCTCCTGC CTGGAAAAAT AAGCCTTTGT GAAAGACTGA 120
 TTTACCATGT ACAATTGTGA TTGTGAACGT TGTGAGTAA ACCTCCAGAC TTTCTCTAAA 180

20 SEQ ID NO:2429

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS02799

SEQUENCE DESCRIPTION:

30 GATCATAAGT NAAAAATGTA TTTAATATAC CTAACCTACC AAACATCATA GCCTAGCCTA 60
 GCCTGCCTTA AACATGCTCA GAACACTTAC ATTAGCCTAC AGTGGGCAAA ACTATCCAAC 120
 ACAAAATCTA TATTGTAATA AAGTTATAAA GANTTTTGAA TAAAANTTCA ATATTTGANG 180
 TACAAA 186

SEQ ID NO:2430

SEQUENCE LENGTH:180

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02800

SEQUENCE DESCRIPTION:

40 GATCTGGTGG AGGGAAGTGA AGATGAAGGC CTCTCAGGCA CCATGGATGG NATGGGTGTG 60
 TGTNAAGGGG GCAGGGTCCC CAGGAGCTGC CCCAGGTCTG GCTNGACAGT TGCACGGNAA 120
 GTCCTGTTTG TAAACTCAAC GTTCCACGN CTTTCCATT AAACCTTACC CCAAATCAAA 180

SEQ ID NO:2431

45 SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02801

SEQUENCE DESCRIPTION:

50 GATCTATTTT TCCTAAAACA TTCCCCTCCC CACTCCTCTC CCACAGAGTG CTNNNTGTT 60

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CCAGGCCCTC CAGTGGGCTG ATGCTGGGAC CCTTAGGATG GGGCTCCCAG CTCCTTTCTC 120
 CTGTGAATNG AGGCAGAGAC CTCCAATAAA GTGCCTTCTG GGCTTTTCTG AACCTTTAAA 180

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SEQ ID NO:2432
 SEQUENCE LENGTH:179
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02802

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SEQUENCE DESCRIPTION:
 GATCTTCACC AATGGCAAGT GGAATGACAG GGCTTGTGGA GAAAAGCINN TTGTGGTCTG 60
 CGAGTTCTGA GCCAACTGGG GTGGGTGGGG CAGTGCTTGG CCCAGGAGTT TGGCCAGAAG 120
 TCAAGGCTTA GACCCTCATG CTGCCAATAT CCTAATAAAA AGGTGACCAT CTGTGCAA 179

15

SEQ ID NO:2433
 SEQUENCE LENGTH:273
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02803

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SEQUENCE DESCRIPTION:
 GATCTAAAAA TTCAATGCAA ATATCTTTTA TTTGGTAGTT TTGTCTACAT ATTTNATGCT 60
 CTAGCATGTG CAATATATCT TTGTAAAGCA CGATGATACA AATCTGGTGC CAGTGTTATA 120
 TTTNGCATAA CATATTTGTA ACAGCATAAA ATATTGTTG ATGATTTTCA TGGGATTTTG 180
 TCTATAATGT TTTCTTATGT AAATNGGAGT TGAATGACTC TGGTAAATGT CATGACTGTA 240
 AAANTGGGGA AANTGACTTT NAGTTCAGTG AAN 273

25

SEQ ID NO:2434
 SEQUENCE LENGTH:178
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02804

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SEQUENCE DESCRIPTION:
 GATCCAAACT AATTTTACAT TTAAAAAAA AGTTAAACTA AACTTCTTTA CTGCTGATAT 60
 GTTTCCTGTA TTCTAGAAAA ATTTTACAC TTTACATTA TTTTGTACA CTTTCCCAT 120
 GTTAAGGGAT GATGGCTTTT ATAAATNTGT ATTCATTAAA TGTTACTTTA AAAATAAA 178

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40

SEQ ID NO:2435
 SEQUENCE LENGTH:176
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02805

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SEQUENCE DESCRIPTION:
 GATCTAAAAA AAATATTGTT AAAAGCATT CCTCTAGGGA ATGGGATTTA GATTAAAAA 60
 GGGTGGGATG GGAACTGTG TTTTTCATTT TAAGTCCTTC TGTACTANNT AATTTGTNAC 120
 CTTGTGCATG TATTACTTTG AAAAAATTTT TAATAAACCC AAATAAAANT CTAAAA 176

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EP 0 679 716 A1

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 SEQ ID NO:2436
 SEQUENCE LENGTH:175
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02806
 SEQUENCE DESCRIPTION:
 10 GATCANCCT CAAGGGCACA TGCCAAGGGC AGAGCAGCCC ATNTAGACAG CTTCGNAGGG 60
 CATGGGGGTG TAGGGAGTTC GGGGTAGCTC CTCATTAAGT ATTTGTNGGN TGAGTAAAGG 120
 GGTGAGGCTC AGTGGCAGGT ACCTCTNCAA TNACAAGCTG CCNCCCCTCT ATGTN 175

15
 SEQ ID NO:2437
 SEQUENCE LENGTH:175
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02807
 SEQUENCE DESCRIPTION:
 20 GATCGGCAGC AAGAGTAAAG ACACAGTCC AGAGGCCAC ACTGTGGGGT CTGGGCCCTG 60
 CCTTAGGCAG CCCCCCTCTT TGGCCCCCTC CTGTCAGGCC CAGGGCTTGG AGTAAAGTN 120
 ACTCTCAGGT GGTGGGGTGG GGAATGTGAA TAAACATGAT TTCTGCCGG GCAA 175

25
 SEQ ID NO:2438
 SEQUENCE LENGTH:174
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02808
 SEQUENCE DESCRIPTION:
 30 GATCCCTTCA CTGGCCCCCT CGGGAGNCCT GGGTTGGACT CAGGGNCTCC NCCAGCTGGG 60
 GNGGNGGACC GCAGCACCTA TCTGAGCAGT TAGAGCGTCT TTTTTCAG ATTGTGTACA 120
 GTAGATTATT TATTTGTNA TTTTGAATA AAATTTATTT TATGGCTTAG GAAA 174

35
 SEQ ID NO:2439
 SEQUENCE LENGTH:172
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02809
 SEQUENCE DESCRIPTION:
 40 GATCTTGTCT GAAATGCTAG TTTCTGACTA CAAAACTAC AGGACATAGT AGATATGCTC 60
 AGTAGAGCTG CTTAAATAA TTCCCTTTT TTTCTGTG AATTCTGTA CAAAACAGG 120
 TCTGTGTAT AATAGAAAC ACATTATGA ATAAAAATCT TAAAAATTA AA 172

45
 SEQ ID NO:2440
 SEQUENCE LENGTH:171
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02810
 50

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SEQUENCE DESCRIPTION:

GATCAATGTC CCTGGTTACC TATGTGTTTG AATTATCTTC GTGTTACAGG TGTTTAATGA 60
 TTTTNCCTCT TCTAGCTTAT TTGTATTTC CCTGTTTTTC TTAAATNAA CATGGTTACA 120
 CTNTGTTTCA GCAACTGTAT AAATTAAACA CAGATNATTA CTA CTGCTAA A 171

SEQ ID NO:2441

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02811

SEQUENCE DESCRIPTION:

GATCGTAAAA TTTAAGCAC TAAAAATTTT TTCATAACCT TTCATAATA AGTTTAATAA 60
 TAGGTTTATT AACTGAATTT CATTAGTTTT TTAAAGTGT TTTTGGTTTG TGTATATATA 120
 CATATACAAA TACAACATTT ACAATAAATA AAATACTTGA AATTCTCAA 170

SEQ ID NO:2442

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02812

SEQUENCE DESCRIPTION:

GATCTACTTT GAATTCACA CTCTCATTAA TAAATTGANT AAAAGGGAAT ATTTTGGCAC 60
 CTGATATAAT CTGCCAGGCT ATGTGACAGT AGGAAGGAAT GGTTTCCCT AACANGCCCA 120
 ATGCACTGGT CTGACTTTAT AAATNATTTA ATAAATGAA CTATTATCAA ATAAACGTA 180
 TGATTCAGTC CTTAAA 196

SEQ ID NO:2443

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02813

SEQUENCE DESCRIPTION:

GATCAAATTT TTTCTTGCA ATNATGTGAT GAGTTGCCAA ATAATTGANA TTATTTTAAA 60
 ATGTTTTGTT CATATTCTTG TTTTATAATT AAAATTTACA TTCAGTGTGT ATGGGTTTTT 120
 TTTTATTTT NACTCTTAAT GTAAGGTGGA TATTNCTGTN ATTTTACATG GTTCTTACT 180
 GAGATTTTAT ATATAANTNA TAAAANGTTT ACCAAA 216

SEQ ID NO:2444

SEQUENCE LENGTH:173

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02814

SEQUENCE DESCRIPTION:

GATCGTTAAT GCCCTTGAAG TGGTTTTTGT GGGTGTGAAC AAATGGTGAG AATTTGAATT 60
 GGTCCCTCCT ATNATAGTAT TGAATAAAG TCTACTTAAT TTATCAAGTC ATGTCATGC 120

CCTGATTTTA TATACTTGTA TCTATCAATA AACATTGTGA TACTTGATGT AAA 173

SEQ ID NO:2445

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02815

SEQUENCE DESCRIPTION:

GATCAGCTCC GTGGGGCTGG TTTTGGTCCA CAGCATAACA GGCAGTGCCT CCTTACCTGT 60
GAGGAATGCA AAATAAGCA TGGATTAAGT GAGAAGGGAG ACTCTCAGCC TTCAGCTTCC 120
TAAATTCTGT GTCTGTGACT TTCGAAGTTT TTAAACCTC TGAATTTGTA CACATTTAAA 180
ATTCAAGTG TACTTTAAAA TAAATACTT CTAATGGAAC AAA 223

SEQ ID NO:2446

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02816

SEQUENCE DESCRIPTION:

GATCTGTCAC TTTGTATAAA AACAAGAAAC GATTAGTTCA TTAACTTTT TCTTTACCTT 60
CTGGTAGTAA AAATAGATAA AATAATTCCG TNTCAACTAC TGTGTGTAAG AAGCCTGTAT 120
CATATGTAAC TGGGACTTTT GTAAATAAAT NTTTTGCGC TCTGCAAA 168

SEQ ID NO:2447

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02817

SEQUENCE DESCRIPTION:

GATCATAAAA TGTATCTTTT CCATGGCCAA CAAGGNGCAT CTNTTATAAA TGCATAATAA 60
CCCAGTTNGT ATCAAAGGGT ATCGACTTAA GTGAAATTTC AACATGCTGT TACTTTTTCC 120
TTTAAATGTA ATNCTGTTTT CCAAATAAAT GGGGGAGACA AATGGAAA 168

SEQ ID NO:2448

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02818

SEQUENCE DESCRIPTION:

GATCTGTGCA ATAAAGTGT TGCAGTCTTA TTATTCTCTA AGAAATTCCT TATGGACGTC 60
ATAATTGTTG TATATTGAAC AAAATATTTA TACTTATGCA GTTGCATAAC ATTGAAATAA 120
AAATTTAGCA TGAAA 135

SEQ ID NO:2449

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02819

5 SEQUENCE DESCRIPTION:

GATCCTGCCA GAAAATTCA AAGACAGTAG ATTGAAAAGG AAAGGCTTGG TAAAAAAGGT 60
 TCAGGCATTC CTAGCCGAGT GTGACACAGT GGAGCAGAAC ATCTGCCAGG AGACTGNGCG 120
 GCTGCAGTCT ACAAACTTTG CCCTGGCCGA GTGAGGTGTA GCAGCAN 167

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SEQ ID NO:2450

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS02820

SEQUENCE DESCRIPTION:

GATCAGNAGG CATCACTGAG GCCAGGAGCT CTGCCCATGA ACCTGTATCC CACGTACTCC 60
 AACTTCCATT CCTCGCCCTG CCCCAGGAGC CGAGTCCTGT ATCAGCCCTT TATCCTCACA 120
 CGCTTTTCTA CAATGGCATT CAATAAAGTG CACGTGTTTC TGGTAAA 167

20

SEQ ID NO:2451

SEQUENCE LENGTH:413

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS02821

SEQUENCE DESCRIPTION:

GATCCGGTTT CTTTTTGCTC GCCCCTGTTT TTTGTAGAAT CTCTTCATGC TTGACATACC 60
 TACCAGTATT ATTCCCGACG ACACATATAC ATATGAGAAT ATACCTTATT TATTTTGTG 120
 TAGGTGTCTG CCTTCACAAA TGTCATTGTC TACTCCTAGA AGAACCAAAT ACCTCAATTT 180
 TTGTTTTTGA GTACTGTACT ATCCTGTAAA TATATCTTAA GCAGGTTTGT TTTCAGCACT 240
 GATGGAAAAA ACCAGTGTG GGTTTTTTTT TAGTTGCCAA CAGTTGTATG TTGCTGATT 300
 ATTTATGACC TGAAATAATA TATTNGTNC TTCTAAGANG ACATTTTGTT ACATAAGGGG 360
 ATGGCCTTTT TTATACAANG GGAATAANAT TNTGGGCATT TCCTATGGAGGGCATT TCCTATGGAA AAA 413

35

SEQ ID NO:2452

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS02822

SEQUENCE DESCRIPTION:

GATCTGTNAT TGGCATCTTG GTTCTACCTT TTATCAGATG TTGTTGCCTT GTGCAAATNA 60
 CATTCTCTCT GAGTCTCCAT TTTCTCATTT ATAACATGCG GAGAATAATA CTTATATTTG 120
 TGGTAGTAGT GTGAACATTA AAAAGATAAT GTATGTGAAG TACAAA 166

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SEQ ID NO:2453

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS02823

SEQUENCE DESCRIPTION:

5 GATCCATGCT AATATTGTAT TTTTNTTAA AACATAGCTT TCCTGTAATT TAAAGTGCTT 60
 TTATGAAAAT ATTTGTAATT AATTATATAT AGTTGGAAAT AGCAGTAAGC TTTCCCATTA 120
 TAATATATTT TGNTATACAA ATAAAATTG AACTGAAGTC TGAAA 165

SEQ ID NO:2454

10 SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02824

15 SEQUENCE DESCRIPTION:

GATCTTGTTA GAAGGCAGTA GGTCTGGGGT GGGGCCTGAG ATTCTGCATT TCTAACCAGG 60
 TCCTGGGAGA TGCTGATGCT ATCGAGCCAC AACCACACTT TGAGTAGCAA GCCTCTGGCC 120
 TATCCTTANN NNTTGAATA TTAAATGCT GCCTCTCAGT CAAA 164

20 SEQ ID NO:2455

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS02825

SEQUENCE DESCRIPTION:

30 GATCAATGCC AGATTTTNTT NTTGGGGTAA GTTAGCTGAA GTCATTTAAA GATGGAAAGG 60
 TGGGAAAATN CTTTGATATT TGATGTCATT GTATCCACAT TTNTTGAAG ACATATTGCA 120
 TACCANTTAT AATNATATCA ATTAAAGTTG ATAAAAGCTT CAAA 164

35 SEQ ID NO:2456

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS02826

SEQUENCE DESCRIPTION:

GATCCCTTCT GCCCTGGCAG AATGGCAGGG GTAATCTNAG CCTTCTNCAN TCCTTTACCC 60
 TAGCTGACCC CTTACCTCT CCCCTCCCT TNCCTTTGT NTTGGGATTC AGAAAAGTGC 120
 TTGTAAGAGA CTGTTTATNT TTAATNAAAA ATATAAGGCT TAAA 164

45 SEQ ID NO:2457

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS02827

SEQUENCE DESCRIPTION:

GATCCAGAAT ATTTTCATTT AAAGCTCAAC CATTAATTGG AACATGGTGA AACATTGTAC 60
 ACATTGTAAG AGTAGGGAAC AGTACAAAAG AATGGAATCA AATACTATAT TATGTGAATA 120

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ANCTAGAGTG ATTTTGAAT TTCACTCTCT TCACCCCTTA AA

162

SEQ ID NO:2458

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02828

SEQUENCE DESCRIPTION:

GATCAAAAAC CTCTATAGTA GCCACTAGGG CAAAAACTGT GTGTATGTGT GTGTGTAAGT 60
 GTGTGTACAC TGTTCATAT GGTCAATAT GGTACCAATA GCCACATGTG ACTATTATAA 120
 TTCATTGCAA TGNAATAAAA TTAAAGGTAT ACTAGCTCAA A 161

SEQ ID NO:2459

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02829

SEQUENCE DESCRIPTION:

GATCTTCACC TCTCTGCCTC CCTACTGCCC CAACATAGCC TTGAGGAGGN TTCTCAGCCA 60
 CCAAAGGGTT CTGGCCCTT CTCACTCTCC TCTCCTCTCA GATGGAAGTC TGGTTATAAT 120
 GGTGTTAGTT ATCGAATAAA AACGACTTCA GAATGCAAA 159

SEQ ID NO:2460

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02830

SEQUENCE DESCRIPTION:

GATCAATTTA AAATATTNA TTTCTTAAAA GCCTTTTTTG CCTGTTGTAA TGTGCAGGAC 60
 CCTTCTCCTT TCATGGGAGA GACAGGTAGT TACCTGAATA TAGGTTGAAA AGGTTATGTA 120
 AAAAGAAATT ATAATAAAG GGATACTTTG CTTTTCAAA 159

SEQ ID NO:2461

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02831

SEQUENCE DESCRIPTION:

GATCTATTTA ATTTGAGGTT GATGTTCTAT CCAATGGCCG AAGATAGCAG CAGGTTTTTT 60
 TTTTCATATG TTGATTTGTT TCATTTGGAT TTTTTTTTA TNATNCTTNA TTGTCTTTTT 120
 TTTNCCCAT CCCTGTCTTG NGATTNCNG GCATGTTN 158

SEQ ID NO:2462

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02832

SEQUENCE DESCRIPTION:

5 GATCTGAAAT GTGATGATTA TTGGAATGCA TAAACATTGA CGTATTTTGG AATGTATTAA 60
 AACTGAAATG GATAAAAATT AGTATATATG TTTATTTTGT TCTATCTCCT TTGGTTGTAT 120
 TTTTCTCTGC AGTATTAAAC ATTTGGAAGA GACTAAAGGT ATGCAAAANT AATGTCTTAT 180
 TTTCAATTATG TGTGCTTCCA TTTGACACAT GGGAAATTAG ATTAATTTC CTATTAANTA 240
 GNACTTTATA CAGAAA 256

10

SEQ ID NO:2463

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

15

TOPOLOGY:linear

CLONE:HUMGS02833

SEQUENCE DESCRIPTION:

20 GATCTTGTGT CTACTCTAGG ACTGGGCCCG AGGGTGGTTT ACCTGCACCG TTGACTCAGT 60
 ATAGTTTAAA AATCTGCCAC CTGCACAGGT ATTTTGAAA GCAAATAAG GTTTTCTTTT 120
 TTCCCTTTT TGTAAATAA TGATAAAATT CCGAAA 156

SEQ ID NO:2464

SEQUENCE LENGTH:156

25

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02834

SEQUENCE DESCRIPTION:

30 GATCTTCTCC TTTGTGAAGC ATCCCTCACC ACTACTACTG TGATGGGTCG GGGCCTTTCA 60
 TCTGTTTTTC CACAGCATCT ATGCTTCTNT NCACTGTATC ATTTATCAA TTGATNNTTN 120
 CTGCGTCCTG TAAAAACAN NGAGTACCTT AAGAAA 156

SEQ ID NO:2465

35

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02835

SEQUENCE DESCRIPTION:

40 GATCTGCATT TATCATGAGT TCCTTTTTTT TTTAACTTT ATTTTGGGA AAGTAACACA 60
 TGANGTAGTT CAGTCATGTC AGGTTTGTCT GGGGTGGANT GGACCAGTCA GGTAGTTGAA 120
 AGTTTTTTTT TAGNGATGAA AAGCTTGTGA NCNCTGTAA ANCATGCTGN ATTTGAAATN 180
 CATCTGTTNA N 191

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SEQ ID NO:2466

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS02836

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SEQUENCE DESCRIPTION:

5 GATCCACCCC CTGCCACAA AAAATTGCTC CTAATCCAC CGCCTATCCC AACCTACAA 60
 GAACTAATGA TAATCCCACC ACCCTTTGCT GACTCTTTT GGACTCAGCC CACCTGCACC 120
 CAGGTGATTA AAAAGCTTTA TTGTTACAC ANAAA 155

SEQ ID NO:2467

SEQUENCE LENGTH:154

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02837

SEQUENCE DESCRIPTION:

15 GATCCTAGCA AATTTGCCA ACCANCTTA CTAAAGGGG AGGAAGGGAG GGCAAAGGA 60
 TGAGAAGACA AGTTTCCAG AAGTGCCTGG TTCTTTTAC TTTCCCTTT GTTGTCGTTN 120
 TTGTAGTTAA AGGAATTTAA TTTTAAAAA GAAA 154

SEQ ID NO:2468

20 SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02838

SEQUENCE DESCRIPTION:

25 GATCGGGCCT AGCCCGGCAA CACTAATGTA GAAACCTTTT TTTTACAGAG CCTAATTAAT 60
 AACTTAATGA CTGTNTACAT AGCAATGTGT GTGTATGTAT ATGTCTGTGA GCTATTAATG 120
 TTATTAATTT TCATAAAGC TGGAAAGCAG CAAA 154

30 SEQ ID NO:2469

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02839

SEQUENCE DESCRIPTION:

35 GATCACCCGG GGCTGTCTGC ATACAGACTT CTCAGGGGAG TTCTCAGCTT GGACCCTTAT 60
 CTCCCAGAA TCCTGGAACC TGCTCCTTCT GCTCTCGTGA CTGACTGTGT TCTCTATGCA 120
 ACTTCCAATA AAACCTCTT ATTTGAAAGG AAA 153

40 SEQ ID NO:2470

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02840

SEQUENCE DESCRIPTION:

45 GATCTTAAGC CCAGTCTGT TCTGCCCCG CTTTCTCTG TTTGATACTA TAAATTTTCT 60
 GGTTCCTTG GATTTAGGGA TAGTGTCCCT CTCCATGTCC AGGAAACTTG TAACCACCCT 120
 TTTCTAACAG CAATAAGAG GTGTNCTTGT CAAA 154

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EP 0 679 716 A1

5 SEQ ID NO:2471
 SEQUENCE LENGTH:152
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02843
 SEQUENCE DESCRIPTION:
 GATCACAGGC CITGCTTTTG TAACAATGAT GACCCCGGCC TGTCTCATAT TCTGAAGAGG 60
 10 AAAAGTCAAA GTGTTGCTGN GGCTCCATAT TTCAACTAAA AATATATCTG TTGGAGAAAG 120
 AAATTAACAA TAAAGAATTT TCATAGGTTA AA 152

15 SEQ ID NO:2472
 SEQUENCE LENGTH:151
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02844
 SEQUENCE DESCRIPTION:
 GATCGTATTC CCTGCTTTAA GGAAGTNTA GNCTTGTTTG GGTGATGAGA CAAAGTTCTT 60
 20 GAGACATTTA AACTGTATTT ACCAGTGTGA AAAATGTCAT TTATGGAGAT TAATTCATTA 120
 TGGAAATAAA ACATTGCCTA AGCCCTTGAA A 151

25 SEQ ID NO:2473
 SEQUENCE LENGTH:150
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02845
 SEQUENCE DESCRIPTION:
 30 GATCCAATCA GCTGTAAGTN TTAAGCACAG GGCTGAGGCT CCCTCCAAGT ACCCACTGGG 60
 AACAGCAGCT TCAACCTGAG CCCTGNGTCC CAGCCAGCCC CCACAATCAC CTATGCCCAT 120
 TCTTCAGAAT ACATTGGATG CATGTGCAAA 150

35 SEQ ID NO:2474
 SEQUENCE LENGTH:149
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02846
 40 SEQUENCE DESCRIPTION:
 GATCCAGAGA GTCTGAAGAC ATTTCTNATG CCTTTATATA TTGGAGAACC CTTCCCCATT 60
 TTNATATCCT TTCTTCAAAA ATCTAAATNA TGTGCCTAAA AATAAGACAT GGCATAATAA 120
 GGTATAATTA AAGAGATAAT AGAATGAAA 149

45 SEQ ID NO:2475
 SEQUENCE LENGTH:153
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50 CLONE:HUMGS02847

55

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

5 GATCCAGTAC CTGAAAGATT TGATAGAAGA GGTCCGCAAG GCAAGGGGGA AGAAAAGGGT 60
 CCCCTAGTTG AGGATAGTCA GGAGCGTCAA TGTGCTTGTA CATAGAGTGC TGTAGCTGTG 120
 TGTTC AATA AATTATTTG TAGGGAAAGT AAA 153

SEQ ID NO:2476

SEQUENCE LENGTH:147

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02848

SEQUENCE DESCRIPTION:

15 GATCCTTTTG GAGTCAGACA GATGTGGTTG CATCCTAACT CCATGTCTCT GAGCATTAGA 60
 TTTCTCATTT GCCAATAATA ATACCTCCCT TAGAAGTTTG TTGTGAGGAT TAAATAATGT 120
 AAATAAGAA CTAGCATAAC ACTCAAA 147

SEQ ID NO:2477

20 SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02849

SEQUENCE DESCRIPTION:

25 GATCTCCAGT GATTGGCGAT TTGACCTGGT TTCTNCCTGG ACTATTTGAA TGGGTGGATT 60
 TGTGGTGCA TCTCTGTCT TCTTTCCTTT TCCATTCTCC TNTATTNTN TATTACATA 120
 CTTGTATGCA ACTNTGTAAT CTGATTNCCC CATGTAACAT TNTAATTGA NGGGTGGTCT 180
 GCGTGTNCAC TGGAAAACAT ATNTATN 207

30 SEQ ID NO:2478

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS02850

SEQUENCE DESCRIPTION:

40 GATCGAGCTC ACAGGGGGCA CCCATCCTGN TAGTCAACAG AGTCTGAAGC AGTCAGGGTG 60
 TTGGATTCTT CTGTTGTTGT CATCAATTCC TGCTGAGGGG TTTCTGGGGT TTTGTTTTTA 120
 ATAAATAACT CCTTTGTAGC CTAA 146

SEQ ID NO:2479

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS02851

SEQUENCE DESCRIPTION:

50 GATCCCGGCC AGCCAGGTGA CCCCCACGCT CTGGATGTCT CTGCTCTGTT CCTTCCCCGA 60
 GCGGCTGCCC CGGCTCCCCG CCAAAGCACC CCTGCCCACT CGGGCTTCAT CCTGCACAAT 120
 AACTCCGGA AGCAAGTCAG TAAA 144

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EP 0 679 716 A1

SEQ ID NO:2480
 SEQUENCE LENGTH:143
 SEQUENCE TYPE:nucleic acid
 5 TOPOLOGY:linear
 CLONE:HUMGS02852
 SEQUENCE DESCRIPTION:
 GATCCAGGCA AATTCATGTT CTTTCTTTGT AACTCACTTT CTTGTC AAC ATTCTGTGA 60
 CTCAATGGAT AGCATATTTT CATCAAGTAG CACGTATAAC GTGATGCTTT CATGTTTCTG 120
 10 CCTTAAATAA AATAACCTC AAA 143

SEQ ID NO:2481
 SEQUENCE LENGTH:290
 15 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02853
 SEQUENCE DESCRIPTION:
 GATCTCTTTG ACTGCTGTAG TACTAAAGTG TACTTAATGT TACTANGTTN AATGCCTGGC 60
 20 CATTITCCAT TTATATATAT TTTTAAAGAG GCTAGAGTGC TTTTAGCCTT TTTTAAAAAC 120
 TCCATTATA TTACATTTGT AACCATGATA CTTTAATCAG AAGCTTAGCC TTGAAATTGT 180
 GAACTCTTGG AATGTTATT AGTGAAGTTC GCAACTAAAC TAAACCTGTA AAATTATGAT 240
 GATTGTATTC AAAAGNTTAA TGA AAAANTAN ACATTTCTGT CCCCTGAAA 290

25 SEQ ID NO:2482
 SEQUENCE LENGTH:143
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 30 CLONE:HUMGS02854
 SEQUENCE DESCRIPTION:
 GATCTGATTG AGATGTACAT AGTTTTTTTT TTTACCATAA CTGAATTATT TNATCTCTTA 60
 TGTTAACATG AGAAATGTAT GCCAAATNAT TAGTTGATGT ATGTTTTTNA ATTTAATATT 120
 35 TAAATAAAAT ATTTGGAAGG AAA 143

SEQ ID NO:2483
 SEQUENCE LENGTH:269
 SEQUENCE TYPE:nucleic acid
 40 TOPOLOGY:linear
 CLONE:HUMGS02855
 SEQUENCE DESCRIPTION:
 GATCCTTATC AGGGAGAGCA GGAATCCTTA TTCCCGGTGT CGCTAGTACT CATCTCTGCC 60
 45 GCCTCCTGTC TGCCCCCAGG CTGCTGCTNC TGCTGCCCTG TGGGTTGTGC CAAGTGTGCC 120
 CAGGGCTGCA TCTGCAAAGG GGCGTCGGAC AAGTGCAGCT GCTGCGCCTG ATGCTGGGAC 180
 AGCNCGCTCC NAGATGTAAA GAACGCGACT TCCACAAACC TGGNNTTNT TATGANCAAC 240
 CCTGACNGTN ACCGTTTGCN ATATTNCNN 269

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EP 0 679 716 A1

5 SEQ ID NO:2484
 SEQUENCE LENGTH:140
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02856
 SEQUENCE DESCRIPTION:
 GATCATACAT TTTATATGGT TGGGACTTCT CTCTTCGGGA GATGATATCT TGTTTAAGGA 60
 GACCTCTTTT CAGTTCATCA AGTTCATCAG ATATTTGAGT GCCCACTCTG TGCCCAAATA 120
 10 AATATGAGCT GGGGATTAAA 140

15 SEQ ID NO:2485
 SEQUENCE LENGTH:139
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02857
 SEQUENCE DESCRIPTION:
 GATCCAACCC CACCCTCCTG GGTGCGGCCA GAGGCAAGGC AGTCGCCCCG GCTCCTGAAT 60
 20 CCAAGAATG GTTCTGGCAA GTACTGCTGT TTGTTTGTAG GGGCAAAGAG TAAAAATAAA 120
 ACGAGGTTCT GCCATGAAA 139

25 SEQ ID NO:2486
 SEQUENCE LENGTH:139
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02858
 SEQUENCE DESCRIPTION:
 30 GATCTGCCGG CTCCCGTCCA GCCTGTGTGG AAAGGAGGCC CACGGGCACT AGGGANNCNG 60
 AATTCTACAA TCCCGCTGGG GCGGCCGGGT CGGGAGAGAA AGGTGGTGCT NCAGTNGTGN 120
 CCCTGGGGGG TCATTCGAN 139

35 SEQ ID NO:2487
 SEQUENCE LENGTH:138
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02859
 40 SEQUENCE DESCRIPTION:
 GATCTTCAAT GCCTCTGAGT CATTGTTATA AAAAATCAGT TATCACTATA CCATGCTATA 60
 GGAGACTGGG CAAAACCTGT ACAATGACAA CCCTGGAAGT TGCTTTTTTT AAAAAATAA 120
 TAAATTTCTT AAATCAAA 138

45 SEQ ID NO:2488
 SEQUENCE LENGTH:231
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50 CLONE:HUMGS02860

55

SEQUENCE DESCRIPTION:

GATCATGGTT CTCTTTGTAC GATAGTTGGG CATCTGTATT TCCACTTGTG TGAATTTGCC 60
 TTTAAATTTT GGTATGGGT TTCACCTTTT AAAATAATCA AACATATTTA TCTTTTCCTG 120
 TGTGATAGGT TTTTNCCTGT ATCTTTTCCT GTTAAACACA CAGACCCCTC CCCAATCTGG 180
 ACATTGAATA CNTATTCATT TTCCTTTGCN NNAATANNC N NACANAC N 231

SEQ ID NO:2489

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02861

SEQUENCE DESCRIPTION:

GATCTGCCCC TGCATTGTAG CTGCTTAAC GGAGCACTTC TCCTTTTCC AAAGGTCTAC 60
 ATTCTAGGGT GTGGGCTGAG TTCTTCTGTA AAGAGATGAA CGCAATGCCA ATAAAATTGA 120
 ACAAGAACAA TGATAAA 137

SEQ ID NO:2490

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02862

SEQUENCE DESCRIPTION:

GATCTTTAAA TTTTGAGACA GTATAAGGAA AATCTGGTTG GTGTCTTACA AGTGAGCTGA 60
 CACCATTTTT TATTCTGTGT ATTTAGAATG AAGTCTTGAA AAAAATTGA TAAAGACATC 120
 TTTAATCATT CAAA 135

SEQ ID NO:2491

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02863

SEQUENCE DESCRIPTION:

GATCCAAATA TTTCAAGCC ATGTAATCCA TTGGTTTGT GGGCAGTTTA ATAAACCTGA 60
 ACCTTTGTGT GTTTTCTAAT TGTACCTGAG TTGACCATCC TTTCTTTTA NAGTATATTT 120
 CTNGTATGAT ATNTGTAAA GCTCTCACCT GGTCTTTTA TGGGGACTTT TCGTTTTTGG 180
 GCAACTGCAG TGTATTTATG TGAANCTTA TANGAGAATT ANTTTTTCCA TGTGCATATT 240
 AATATGGTNC CTCCACACAT GGNNAGGGCA CAGTGGCTTC GTGTTN 286

SEQ ID NO:2492

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02864

SEQUENCE DESCRIPTION:

GATCATGCCT CTTTCCAACA CGTGTTTACA ATCTCCAAAG GGACTGTATT TNTNCTCTGT 60

GCTTAATNTG ATTTGAAATA TGTGAATCA AAGTGAAATA TTTATNTTTT GAATAAAGGA 120
GATAATAGCC TTAATA 135

5 SEQ ID NO:2493
SEQUENCE LENGTH:135
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02865
10 SEQUENCE DESCRIPTION:
GATCGAAAAC AAACGNTAGA TAATNCCCAA GGAGCTTACC AAGAGGCATT TNATATAAGC 60
AAGAAAGAGA TGCAACCCAC ACACCCAATC CGCCTGGGGN TTGCTCTTAA CTTTCCNGTA 120
TTTNACTATG AGATN 135

15 SEQ ID NO:2494
SEQUENCE LENGTH:135
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
20 CLONE:HUMGS02866
SEQUENCE DESCRIPTION:
GATCATGCCA CTNCACTCAC ACTGACACTG CCTCGGACAA CAGAGCAANA CTNCATCTCA 60
AAAACAAACA AAAAAATCA CAGNCTCATT TTAAAGGAGC AGCAACCNA CCAAATACAA 120
NCTTCATTG ACAAN 135

SEQ ID NO:2495
SEQUENCE LENGTH:134
SEQUENCE TYPE:nucleic acid
30 TOPOLOGY:linear
CLONE:HUMGS02867
SEQUENCE DESCRIPTION:
GATCATTAAC ATGCCAGGGC AGTTCCCACT GATTTAGATG GTCCAAGATA ATCTCATTCA 60
GGAGGCTTGA AACATTAATG GTTTAGTCTT GTGAATTTA ACAGTTCTCT GTCATCGTTT 120
35 AACAAAACCA ACAN 134

SEQ ID NO:2496
SEQUENCE LENGTH:134
40 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02868
SEQUENCE DESCRIPTION:
GATCATGCCA CTGGACTCTG TGCTGAGCAA CAGAGTTAGA CCCTGTCTCT AAATAAATAA 60
ATAAACAAAT AACAGTAAA AAAATGTATA GTTCAATCCT TATCTGTATT AAACCTCCTT 120
45 TAACTTGTGT GAAA 134

50 SEQ ID NO:2497
SEQUENCE LENGTH:133

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02869

SEQUENCE DESCRIPTION:

GATCACATGT GGGCCCGTGT CTGGCCGCCG CCGCCCGGCC CCGTCCCTGC GGNCACCACC 60
TAATTTATTG CCGTGCGTCC TGCTGCTGTG ACTGCTTTTG TACCTTTGCA ATAAAGAATT 120
TTCTGGTTTC AAA 133

SEQ ID NO:2498

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02870

SEQUENCE DESCRIPTION:

GATCCTGGAC ATATTTTATA TTTATACCAA ATATTTTATA TATTNCTAC TGTTGTCAAT 60
GGTAGTGGTT TTAAATTTT CAAACATTCA TTACTAGTAT ATAGAAATAN AATCACTTTT 120
TAAAAATGTA AA 132

SEQ ID NO:2499

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02872

SEQUENCE DESCRIPTION:

GATCCTGTTT TTTCTTAACA AGTTGAGGCG TGGGTAGAGC AGGAATTGGT TTTCCAGCAT 60
TGTGTCCGTA AACCTGAGTT AGAATAAGAT GTAACGGAAG CCACGATAAA GACTCGGTCA 120
AATCCTGCAA A 131

SEQ ID NO:2500

SEQUENCE LENGTH:133

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02873

SEQUENCE DESCRIPTION:

GATCCTGGAT GGAACCTGGCT TCTTTATCGA GAAGAATATA ATTCTCCATG AGGACTTAAT 60
GAATCCAAAC CTGTGTCATG CCTGGTTTGC ATACCCAATT AAACACTNGA AATAAAAAAT 120
NTTNGGGTNN AAA 133

SEQ ID NO:2501

SEQUENCE LENGTH:130

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02874

SEQUENCE DESCRIPTION:

GATCTCTGCT CTTTGTGAGA GATTTGCAAA GACTCACGTT TTTNTTGTGTT TCTCATCATT 60

CCATTGTGAT ACTAAGAAAC TAAGAAGCTT AATGAAAAGA AATAAAATGC CTATGTTGTT 120
GTTCTAGAAA 130

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SEQ ID NO:2502
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02875

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SEQUENCE DESCRIPTION:
GATCAAAAAA GGCAGATGNA ANTACTTAAN ACTCAGTGTT TTGGAGAGAT TTCCTTTNAG 60
TTTGTTGGTT GGCTGGTTTG AACGATAGAA ATATGCAGCA TGCAATATAT GCTTATATTT 120
NATTTNAATN 130

15

SEQ ID NO:2503
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02876

20

SEQUENCE DESCRIPTION:
GATCCCCCAC CTGGCAGAGG ACCCAGTACA AAATAGGCAC TCAATAGATG TTACACCAAC 60
TTTGGAAGGG CAAACATATT TCTTAATGAG AGGCAGTCCT TCATGTTTTN CAATAAAATG 120
ACTTTTAAA 129

25

SEQ ID NO:2504
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02877

30

SEQUENCE DESCRIPTION:
GATCTTCTCC GAGGCCACCC GAAGGTACTG AAGAGCCTCA CCTGGGGGCA TTTTGTGGGT 60
GGAGGGCCAG AGTGTGTATA CCCAGGCTTG TCTGGAAGGA GAAGGCCTTT GCTGCCTGAA 120
AGTCTCAAA 129

35

SEQ ID NO:2505
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02878

40

SEQUENCE DESCRIPTION:
GATCTAAATA AGTGTTCCTA GGAAAGTTTT CCTAAGCAAA TGTAATATTA CCTCATTGG 60
GCATCATTAC TCTGTTAATT CTATATCAAA GGAAATAAAC TTGCTACTTG CACTAAATGA 120
AAAAACAAA 129

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SEQ ID NO:2506
SEQUENCE LENGTH:128

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02879
 SEQUENCE DESCRIPTION:
 5 GATCGTGCCC CGGGGCGCCG GCCCCTGNAG GGGCTCACCT GGATGGGGCC TGCAGTGCGT 60
 TCCCGCTTTG CTTCTTCCC TGGACGGCCC GCTCCCGAA ACGCGCGCAA TAAAGTGATT 120
 CGCAGAAA 128

10 SEQ ID NO:2507
 SEQUENCE LENGTH:127
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02880
 SEQUENCE DESCRIPTION:
 15 GATCACTCTT GTGGTTTGG GGGATGGCAT TATAAGAGAG GAGACTGGAN ACAGGGGGGC 60
 TATTGTNATG CAGATTTGTT GGATGTCCAC CCAGCATTCA CTTTNCAT CTTTGCCAG 120
 GGGNNN 127

20 SEQ ID NO:2508
 SEQUENCE LENGTH:128
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02881
 SEQUENCE DESCRIPTION:
 25 GATCCACGC AGCGCTGAAC CGAACCGAGT AGGAAGCCTT TCTCCCCANG GCACGTGGCT 60
 TCAGGGCGTT TCCATTGAC CAAGTTTGAC CCTGNTTGA ATAAAGAGAA GTGCGTTTGG 120
 30 ATTAGAAA 128

35 SEQ ID NO:2509
 SEQUENCE LENGTH:129
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02882
 SEQUENCE DESCRIPTION:
 40 GATCGAGCTT CTCCTCTGAG TTCTAACAAA ATGGTGCTTT GAGGGTCAGC CNTTAGGAAG 60
 GTGCAGCTTT GTTGCTCTT GAGCTTCTG TTATGTGCCT ATCCTAATAA ACTCTTAAAC 120
 ACATTGAAA 129

45 SEQ ID NO:2510
 SEQUENCE LENGTH:125
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02883
 SEQUENCE DESCRIPTION:
 50 GATCTCTGAT TTAACCGTGT ACTATCCACA TGCATTACAA ACATTTCGCA GAGCTGCTTA 60

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EP 0 679 716 A1

GTATATAAGC GTACAATGTA TGTAATAACC ATCTCATATT TAATTAAATG GTATAGAAGA 120
ACAAA 125

5 SEQ ID NO:2511
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02884
10 SEQUENCE DESCRIPTION:
GATCTTCCAT CTCCTCAGCA AAAAAATAGG AGCCCTGGCC CCCCAACTTT TTNCANAGTA 60
ATAGCCTTAN TTCCTTCCTT ATCTCCTTAC CAAAGTACAN GTNACATCTT TCCCACCTTT 120
CNTN 124

15 SEQ ID NO:2512
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
20 CLONE:HUMGS02885
SEQUENCE DESCRIPTION:
GATCTACAGA TTCAATGCAA TTNCTATTAA AATCTNATCT GGCTTTTTTT GCATAAGCAA 60
CAAAGGAAAA ANTAAGACAT CAAAATTNA AGANCTTTTG TCCTACAAAC AATATCATGA 120
25 NGAN 124

SEQ ID NO:2513
SEQUENCE LENGTH:343
SEQUENCE TYPE:nucleic acid
30 TOPOLOGY:linear
CLONE:HUMGS02886
SEQUENCE DESCRIPTION:
GATCAGAAAA TTCATATTTA AGCAAAGTGA TACAAACACA GTGATTTGGG AATGCCTTCA 60
35 TTTACAATGC AATACTTAAA TTTTAATACT CTTGTAGGAG AAAAAGCAAC TGTATAAATG 120
AATGTAGAGT GACTTTCTGC AATATTTCAA ACCTATATCA GAGAATTACA CTGTGGGAAA 180
NCTACCATTG TAATAAGTGT AGCAAAATCT CCTTAGATAT CTGAAAAGTC ATACTGGATG 240
GAATCTGTAG GAAACGGTTC TATTTTGAGG GAAGGGGGAT TCCTTTTGT TTTTAAAGTG 300
AATTCAGAAA ATGTTATAAA TAANTCTTTT GGTTATTAT AAA 343

40 SEQ ID NO:2514
SEQUENCE LENGTH:123
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS02887
SEQUENCE DESCRIPTION:
GATCTNTACC CCACCCCTAT CTAACACCAC CCTTGGNTCC CACTCCAGCT CCCTGTATTG 60
50 ATATAACCTG TNAGGCTGGC TTGGTTAGGT TTNACTGGGG CAGAGGATAG GGAATCTNTN 120
ATN 123

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EP 0 679 716 A1

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 SEQ ID NO:2515
 SEQUENCE LENGTH:121
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02888
 SEQUENCE DESCRIPTION:
 GATCCAAAAT TACCTTCCTA TTGCATTTCC TACTCCTTTG CTACGNGTAT TGGACCTCTG 60
 GCCAAATNAC AAAAGATGTA CTCTTTGTNC TCTAAAACCA CACTAAAGTT TTCTNACTNN 120
 10 N 121

15
 SEQ ID NO:2516
 SEQUENCE LENGTH:122
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02889
 SEQUENCE DESCRIPTION:
 GATCAACCAA CCTTAAATAT ATGTATGTAT ATATGTATAT GTGAAAAACA GTTTGTATAG 60
 20 TTGGAATATT TGTNTTTGTA ATTACTTGTG ATGTTTTAAA ATAAAANTTT TATTCAGTTA 120
 AA 122

25
 SEQ ID NO:2517
 SEQUENCE LENGTH:122
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02890
 SEQUENCE DESCRIPTION:
 30 GATCTGGCAC CCCTGGGTG GAGTGTCCCT CGGGGGCTTT GGGAAAGCAT GGCACCCTCA 60
 GACCACACAG TAGCCAAGTT CTGGAGCAAA TAAAAGGCCT GTGTTATNTC TTGTNCTTGA 120
 AA 122

35
 SEQ ID NO:2518
 SEQUENCE LENGTH:119
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02891
 40 SEQUENCE DESCRIPTION:
 GATCTCAAAG ATATGCACCA GTTTGAATAA ATGCTTGTIT AAAGATTAAA TTTTACAATT 60
 CATTTTAAAT TNTCATTTTG TGACAATATT TCTAAACAAC GNCCATTTTA ATNACCAAA 119

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 SEQ ID NO:2519
 SEQUENCE LENGTH:118
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50 CLONE:HUMGS02893

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EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCATAGGA TAGCTGACTT TGACAGTCAC ATTTATAAAG TAATTCACCT AAAGATATAT 60
 ATTTTTCCTCA AACAAGTTT GCTACTTTTG AAAATAAATC TTTCTTTATA TTGCTAAA 118

SEQ ID NO:2520

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02894

SEQUENCE DESCRIPTION:

GATCCAAACC CATCTTCCTG GACCTGAAGC TTATGCTTCC AGGCACCCCA CTCCTGAGCT 60
 GAATAAAGAT GATTAAAGCT TAATAAATCG TGAATGTGTT CACATGAGTT TCCATAAA 118

SEQ ID NO:2521

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02895

SEQUENCE DESCRIPTION:

GATCTGCACA GTGTATGGC ACCCTACTTC CTGCAGCAAC GGGACACNCT GCGGCGCCAT 60
 GTNCAGAAAC AGGAGGCCGA GANCCAGCAG CTGGCAGATG CCGTCCTNNC AGGGCGGN 118

SEQ ID NO:2522

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02896

SEQUENCE DESCRIPTION:

GATCCTATCT TTNCTGGCAG GACTGGNAGC CATGGTGGGC TACGTTNTGN TCAGCGGCAT 60
 TTTTCCATC CAGCGGGCAA CGCTGCTCGG GCCCCAGGCA CCCGGACCCT GGGCATGN 118

SEQ ID NO:2523

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02897

SEQUENCE DESCRIPTION:

GATCTAGTCC GGACTTGCTG TGTATATTGT AACGTAAAT GAAAAAGAA CCCCCCTTG 60
 TATTATAGTC ATGCGGTCTT ATGTATGATN AACAGTTGAA TAATTGTCC TCAGAAA 117

SEQ ID NO:2524

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02898

SEQUENCE DESCRIPTION:

GATCGTNATT NAGAATCCAT GTGAATAGAC CTGCGATGGC CAAGGCTGTT TAAGCNACAC 60
 TGGGTTGGAA ACACTTGGGC TCTCTCATNA TTATTAAAT TCTATTTCAA TCTAAA 116

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SEQ ID NO:2525

SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02899

SEQUENCE DESCRIPTION:

GATCCTTTGC NTTCAAGACT AAGTTAATAG AGAAGATGTT TGTAACNTG GCCCAAGCTT 60
 GGNCTCCAG TGTATTGAAG CTAACCTCTT TNAGAAGCAC CACTCTCATA TATNAN 116

15

SEQ ID NO:2526

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS02900

SEQUENCE DESCRIPTION:

GATCTCTGGG TAAAGAGGCC GTTATCTTT GTAAACACGA AACATTTTTC CTTTCTCCAG 60
 TTTTCTGTTA ATGGCGAAAG AATGGAAGCG AATAAAGTTT TACTGATTTT TGAGAAA 117

25

SEQ ID NO:2527

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02901

SEQUENCE DESCRIPTION:

GATCTAGGAA GACTTTGGAA AGAGTAGGAA GACTTTGGAA AGACTTTTCC AACCTCATC 60
 ACCAACGTCT GTGCCATTTT NTATTTTACT AATAAAATTT AAAAGTNTTG TGAATCAAA 119

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SEQ ID NO:2528

SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02902

SEQUENCE DESCRIPTION:

GATCCCCAGG AGGCCTGGNC CGCCCAGAGG CTCCTCTCAG GCTGGGCCCC GACGTTTGCG 60
 NCAGTGTTC TTGTGCCCGT GGGGCCGGA GCNAGTAAAG TCTGGGCCAG GCAAA 115

45

SEQ ID NO:2529

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS02903

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EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCACGTTT CAGGGTCCTC CAAAANGCTA GCCCGGCACT AACTAGGGA ATTCNCCCT 60
CTCCTGTCAC TTGTCATGGT CTCCTTGGT ATTAAAGGCC ACCATTGCA CAAAACAAA 119

SEQ ID NO:2530

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02904

SEQUENCE DESCRIPTION:

GATCCCAGAA ATGTAGCTTG TTTCATATTT TAGTCTTCTT ATTTTGTAA AATGTGTAGA 60
ATTGCTGTT TTTNTTTTTC TTTTGACAAC TCAGGAAGAA ACTGACCTCA GAAA 114

SEQ ID NO:2531

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02905

SEQUENCE DESCRIPTION:

GATCAGCCCC CAAAGAAATG GGGGTGCATG CTGGGCCTGG CCCCTGGCC CACCCCCACT 60
TTCCAGGGCA AAAAGGGCCC AGGGTTATAA TAAGTAAATA ACTTGTNTGT ACAGCCAAA 119

SEQ ID NO:2532

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02906

SEQUENCE DESCRIPTION:

GATCTTGGCT TCTCAACAGG GCAAAGATAC CAGGCCTNCT GCTGAGGTCA CTGCCACTTC 60
TCACATNCTG CTTAAGGGAG CACAAATAAA GGTATTCGAT TTTTAAAGAT AAA 113

SEQ ID NO:2533

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02907

SEQUENCE DESCRIPTION:

GATCAAAATG TTTGAAGAAA GGAACTTTAT TTTTGCAAGT TACGTACAGT TTTTATGCTT 60
GAGATATTTT AACATGTTAT GTATATTGGA ACTTCTACAG CTTGATGCCT CCTGCTTTTA 120
TAGCAGTTTA TGGGGAGCAC TTGAAAGAGC GTGTGTACAT GTATTTTTTT TCTAGGCAAA 180
CATTGAATGC AAACGTGTAT TTTTAAATA TAAATATATA ACTGTCCTTT TCATCCCATG 240
TTGCCGCTAA GTGATATTTT ATATGTGTGG TTATACTCAT AATAATGGGC CTTGTAAGTC 300
TTTTCACCAT TCATGAATAA TANTANATAT GTACTGCTGG CATGNAAA 348

SEQ ID NO:2534

SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 5 CLONE:HUMGS02908
 SEQUENCE DESCRIPTION:
 GATCTGATGG TTTAAAAAT GGGAGCTTCC CTNCACAGAC TCTNTCTCTC GTGCCGCTGC 60
 CATGGCCATG TAAGNAGTGC CTTNACCTT CCCCCGTGAT TGTNAGGCCT N 111

10 SEQ ID NO:2535
 SEQUENCE LENGTH:110
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS02909
 SEQUENCE DESCRIPTION:
 GATCCCAACA GGACAAATCT GTGTACCTAT CTTTCTATCC TCCCTGAGCC TGTACCAACT 60
 AGATTCTTCA TATGTATTG TAACAGATTA AATTGGAAAG CAAACACAAA 110

20 SEQ ID NO:2536
 SEQUENCE LENGTH:110
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS02910
 SEQUENCE DESCRIPTION:
 GATCCCAAC TGCTCCAGCC TCTGCCCAAC TGAATCTTCA GCATGTTCTC ATCGGCGGAC 60
 TNTCTTGTGT AATGTAACT GTGCCATGT ATTAAAAAT GTGAACTAAA 110

30 SEQ ID NO:2537
 SEQUENCE LENGTH:110
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 35 CLONE:HUMGS02911
 SEQUENCE DESCRIPTION:
 GATCTGTTTG GAAACATAG ATTGTTTCC CCTCAAATAA GGGGAAAAA AAANACCCTT 60
 TNTNCAATN GNTTCTTTG TAAAAAATTA TTTTAAAGG AAATCACAAN 110

40 SEQ ID NO:2538
 SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 45 CLONE:HUMGS02912
 SEQUENCE DESCRIPTION:
 GATCTTTTTA ACTCTACTGT GTCATTAAGA TGCTTTGTAC AATGCCAAAC CATAGTTGGA 60
 GAAACTAAGT TTAATAAATA TCAAATAGAT TTTCTGTATT AAAGTTAAA 109

50 SEQ ID NO:2539

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EP 0 679 716 A1

SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02913
 SEQUENCE DESCRIPTION:
 GATCTCCCCC ACCCTTGGAT TAGAGTTCCT GCTCTACCTT ACCCAGAT AACACATGTT 60
 GTTCTACTT GTAAATGTAA AGTNTTTAAA ATAACTATT ACAGATAAA 109

10 SEQ ID NO:2540
 SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02914
 SEQUENCE DESCRIPTION:
 GATCTCCTNT CCCTCACTCA GTGCACGGGA CAGCTNCTCC TCCGTCACAG CTTTGGNATG 60
 AAAGACAGAA GACAGCATGA TTGGCCTCAC CCACGTGCAG GNCAATNN 109

20 SEQ ID NO:2541
 SEQUENCE LENGTH:107
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02915
 SEQUENCE DESCRIPTION:
 GATCTGTAC TCAACTTGCT GCGTNACCTG AACACGTAC TTTACCTCTC TGTGCCTCAG 60
 TTTTCCCATG CATGAAAAAT AAAATAAAAT AAAACGGGGA TTCTAAA 107

30 SEQ ID NO:2542
 SEQUENCE LENGTH:112
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02916
 SEQUENCE DESCRIPTION:
 GATCAGTAAG GATTTCACCT CTGTTTGTA CTAACCAT CTACTATATG TTAGACATGA 60
 CATTCTTTT CTCTCCTCC TGAAAAATA AGTGTGGGAA GAGACAAATA AA 112

40 SEQ ID NO:2543
 SEQUENCE LENGTH:109
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02917
 SEQUENCE DESCRIPTION:
 GATCATAGAA GGTGGGGTT CCAGAAAGGC ATCTGTGTGA TGGTTCCATT GATGTGGGAT 60
 TTCCCTACTT GCTGTATTCT CAGTTTCTAA TAAAAAGAAC CAAATNAAA 109

50 SEQ ID NO:2544

55

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02919

SEQUENCE DESCRIPTION:

GATCCAGGAG ATANTTTTT CATTATCCT GACCAAGACT GAGCCAGCTT AGCAACTNCT 60
GGGGAGACAA ATNTNAGAAC CTTGTCCAG CCAGTNAGGA TGACAGTN 108

SEQ ID NO:2545

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02920

SEQUENCE DESCRIPTION:

GATCGAGCCC AGCGTACAAC TTCCTCAAGT CGCCCAAAGA CAACGTGGAC GACCCACGG 60
GGAACCTCCG CAGCGGGCCC CTGACGGGGT GCGGGGTGTT CCTGCTGCNN NNGTGCCTC 120
TCCTGGGCAT CGTTGTCTGC GCCGTGGTGG GGGCCGTGGT GTTCCAGAAG CGGCAGGAGC 180
GGAACAAGCG CTTCTACTGA GTGGCGCCTC CGGCGGTGGC CTGTCCCTGG GCCCAGGAGC 240
CAATGTGAAC TTTTGGNT ACCGGGATTA TAAANGAACA ACAAGATGAC CTTATTTCTT 300
AACTGTTCA AATAAAATGA TAAAAAGTAT TTTCAAAAA AGN 343

SEQ ID NO:2546

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02921

SEQUENCE DESCRIPTION:

GATCCTGCCG TGCCCCATC CTGGCTGTTG GGGGTGTCCT GAGCCACCT NNNTNCGCCT 60
GTCCCTTCA GCCAACCCGT TTCTGCAGTA AAATTAAGCC TGTCAAA 107

SEQ ID NO:2547

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02922

SEQUENCE DESCRIPTION:

GATCACTGAA CCAGACACAG CATTGCTGAC ACATGAGACT AACACGTGCA ATTATTTAAA 60
AAGATTCAA TAAACTNCC TGGCTGGCTC CGGGCCGCCC CTAAA 105

SEQ ID NO:2548

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02923

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCCTGTGG GTTTAGTATC ATTATCTTCA GCTCTTTGAT ACNCTGTGTT AGAGTAATAG 60
CTAAAGGAAG TTCATGTCAA TAAATTCATA CTTATATCAC AAA 103

5 SEQ ID NO:2549
SEQUENCE LENGTH:104
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02924

10 SEQUENCE DESCRIPTION:
GATCCAGAGC TGGGGTGGAA GGAGAGCCAT TCTGAACGNC ACGNCTGGCC CGGTCAGTGC 60
TGCATGCACT GCATATNAAA TAAATCTGC TACACGCCAG GAAA 104

15 SEQ ID NO:2550
SEQUENCE LENGTH:103
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02925

20 SEQUENCE DESCRIPTION:
GATCCCNAGG CTCTGTTCCA TGAGCCTGTT GCANGTTTGT GTACTTTAGA AATGTAACCT 60
TTTGCTCTTA TAATTTTATT TTATTAAATT AAATTACTGC AAA 103

25 SEQ ID NO:2551
SEQUENCE LENGTH:102
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02926

30 SEQUENCE DESCRIPTION:
GATCGATGAG GCAGGTCAGT TGTAAGTGAG TCACATTGTA GCATTAAATT CTAGTATTTT 60
TGTAAGTTGA AACAGTAACT TAATAAAGA GCAAAAGCTA AA 102

35 SEQ ID NO:2552
SEQUENCE LENGTH:102
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02927

40 SEQUENCE DESCRIPTION:
GATCATATCT AGTNTTNAAG TCTCTAGGAA CAATAGAGAT TATATCATAA CTCTGAAGAT 60
GGACTCTAAA CTTGGTTTA CCTCCATGGA AAATAANCGN NN 102

45 SEQ ID NO:2553
SEQUENCE LENGTH:101
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02928

50 SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

GATCGAATGA GGGTTAAATG AATTATTTCA TGTAAGCTC TTAGCCCTGT GCCTGGTACA 60
TAGTAAATNC TAAATAAATA GTGGTATTCT TACTGTTAA A 101

5 SEQ ID NO:2554
SEQUENCE LENGTH:390
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02929

10 SEQUENCE DESCRIPTION:
GATCCAGCTT ATTCTTTTAT TTTCAAGTCC ATTCTGGGG CTGGTGGGGA GGCAGGAGAA 60
TACCCCTCCC TAAGCCCTTA GTGTGTGCCG AGCTTGCTTT NTGATGTTGG CAGGGGAGGG 120
GAGACCTGGG TGGTGNCTGA GTTCCCTTTA TCAAACCCTT CAATGGGCAC AAAATTGAGT 180
15 GCTNNNTNN TAGGTTTTAT TNNNNATGA ATGTCCAAAT CTGTGTTTCC CCCTGCCANA 240
ACAGACTGTG TGGCCAGTTG AAAGTGTCTT GGTGTGTGGT TCATCTCTCC CTCATTTTCT 300
TGGAGGCAGG GCCTGAGANC CCTGNCANAA TCTCCTATGG TTNTGAATCC ACGGCTTCTT 360
TTTGGACATT AAAGGTTGAT TTGATGCAAA 390

20 SEQ ID NO:2555
SEQUENCE LENGTH:227
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02930

25 SEQUENCE DESCRIPTION:
GATCTATCCT CAGCACTGCT GAGTGTGCAG TCACACTTTC CTACCAACCC NCTTCTTACC 60
ATCTCTAGCT GCCATTGTG GGGGGAACAA AACAAGGGAA TCCTGATTGT GTACAGTATA 120
AATTGTATTA TATTTTTTGT ACTTATGTTT TATGTAATA GTTTGTCTCA TTCAATTGTA 180
30 TGTGAGCATT GAAATAAATC CTACCATTTA GGGGAAAAAA ATNNAAN 227

SEQ ID NO:2556
SEQUENCE LENGTH:106
SEQUENCE TYPE:nucleic acid
35 TOPOLOGY:linear
CLONE:HUMGS02931

SEQUENCE DESCRIPTION:
GATCTTCAAA AATAATGCCT CTGTCTAGCA TGCCAACAAG AATGCATTGA TATTGTGAAC 60
40 ATTTGTGATA TATGTATTAA TAAATAGAGC AATTACAAGC AGCAAA 106

SEQ ID NO:2557
SEQUENCE LENGTH:99
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS02932

SEQUENCE DESCRIPTION:
GATCTTTCTT ACACAGTGAT TCATTCCTCT ATTTGTACAG TGGCTTTATG AAATATTGTG 60
50 AATTGATACT GTAATCAATA AAGTGCTTTT AACCAGAAA 99

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 SEQ ID NO:2558
 SEQUENCE LENGTH:98
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02933
 SEQUENCE DESCRIPTION:
 GATCCTGGTT CCCTGTTTGG AAAATTCACC ACCTCTAGCT CCTCACTGTT CTTTGTAAAT 60
 AACACGCTGT TGGTAATCTT ATTAATTATT TAACCAAA 98

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 SEQ ID NO:2559
 SEQUENCE LENGTH:97
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02934
 SEQUENCE DESCRIPTION:
 GATCTGGGGA CCCTGACTGC ACAGAACAGT GGGCGCNTTA CAGACCACCG ACCGCCGAG 60
 GGTGAATTAC ATCTTAATAA AGCTACTGTG AGAGAAA 97

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 SEQ ID NO:2560
 SEQUENCE LENGTH:93
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02935
 SEQUENCE DESCRIPTION:
 GATCGCCGCC AACATCCAGG CTGACTACTT GTATCGGTGA CGCCCCACCG GCCCGCAGCC 60
 CCTGCTGCCC AATAAAACCA CTCCGACCCC AAA 93

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 SEQ ID NO:2561
 SEQUENCE LENGTH:92
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02936
 SEQUENCE DESCRIPTION:
 GATCATCCCT TGACAGTAGT TTGCTTTCAT CTCACCTTTC ATTTGTCCCA AANNACCTA 60
 TATTTAATAA AGTCCCCCCC NGTNGTCTCA AA 92

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 SEQ ID NO:2562
 SEQUENCE LENGTH:91
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02937
 SEQUENCE DESCRIPTION:
 GATCCACAAA ATGAGACAAT GCATGTGAAA ATCCATGCTC ATGTTCTAAA CATGGAAACT 60
 AGGAGCCTAA TAAACTTCT AATTCAGTAA A 91

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5 SEQ ID NO:2563
SEQUENCE LENGTH:96
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02938
SEQUENCE DESCRIPTION:
GATCGTATTT TTATATCATA TTCACATATT TTTTTTTTA ATTGGTGTTA GATGACATGA 60
10 TTAATAAAAA AGGCAAGATA TTTTCAGAAT TTGAAA 96

15 SEQ ID NO:2564
SEQUENCE LENGTH:88
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02940
SEQUENCE DESCRIPTION:
GATCGCGCCA TCGCACTCTC AGCCTGGGCA ACAAGAGTGN AACTCCATCT CAAAAAATA 60
20 AAAATAAAAT AAGTAAGNAA TACCTAAA 88

25 SEQ ID NO:2565
SEQUENCE LENGTH:87
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02942
SEQUENCE DESCRIPTION:
GATCTAATAT ATATCATCAG AAAATATATA TTGTATGTTT ACTCTTATTT TCAGAAAGAG 60
30 AAAATGAATA AAAATGATGA CATCAAA 87

35 SEQ ID NO:2566
SEQUENCE LENGTH:87
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02944
SEQUENCE DESCRIPTION:
GATCGCTTGA NCCCAGGAGT TTAACCAG CCCGAGGAAC ATGGCGAAAC CCCATCTTTA 60
40 CAAAAATAC AGAAATNAGC CAAGAAA 87

45 SEQ ID NO:2567
SEQUENCE LENGTH:86
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02946
SEQUENCE DESCRIPTION:
GATCTAAGGG GTTGCCATGG TGTGAACAA TGCAACTTTT TATTAAAAA AGCTCTGCAC 60
50 TGCCATGTAT GAAAGTNTCT TTATGN 86

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5 SEQ ID NO:2568
 SEQUENCE LENGTH:86
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02947
 SEQUENCE DESCRIPTION:
 GATCCNGGAT TGCTGGGAAT GGAAGCCAGG TGGGGTCATG GCACAAGTTC TGTAATCTTC 60
 AAAATAAAAC TTTTITTTTG TACAAA 86

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 15 SEQ ID NO:2569
 SEQUENCE LENGTH:85
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02948
 SEQUENCE DESCRIPTION:
 GATCCTGGCC ACTATGCCAG TTCTGACCTC GCATCCCCCT ACCCCGAGCC CATGCAGTCT 60
 GGGAACATGC CGCCTTCTCT CCAAA 85

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 25 SEQ ID NO:2570
 SEQUENCE LENGTH:85
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02949
 SEQUENCE DESCRIPTION:
 GATCAAATTG TACTAGTGTC TGCAGGGTTT GTCAGTACTC GTCAAAGCCA AGTCCAATTA 60
 AAAAAAAAAAG TCTTTGCCCT CCAAA 85

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 35 SEQ ID NO:2571
 SEQUENCE LENGTH:85
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02950
 SEQUENCE DESCRIPTION:
 GATCTTTTCT TTAAAATTTC TCTGCACACA CAGGACTTCT CATTTTCCAA TAAATGGGTG 60
 TACTCTGCCC CAATTTCTAG GGAAA 85

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 45 SEQ ID NO:2572
 SEQUENCE LENGTH:85
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02951
 SEQUENCE DESCRIPTION:
 GATCTTTTAC CCCTTTCACT CTTGGCTTTC TTATGTTGCT TTCATGAATG GAATNGAAAA 60
 AAGATGACTC AGTTAAGGCA CCAAA 85

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SEQ ID NO:2573
SEQUENCE LENGTH:84
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02953
SEQUENCE DESCRIPTION:
GATCTGCCTG ATGGGAGGGC TCCTGTCGAG GGAGACAGAC ATATCCCCAC TGAAAAATTA 60
ATAAAATTGG TTTTACATAT CAAA 84

SEQ ID NO:2574
SEQUENCE LENGTH:84
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02955
SEQUENCE DESCRIPTION:
GATCTGACTG GAAAACAATC CTGTATCCCC TCCCAAAGAA TCATGGGCTT TTTTTTNAN 60
TTAAAAAGCA GACAAATAGA CAAA 84

SEQ ID NO:2575
SEQUENCE LENGTH:82
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02957
SEQUENCE DESCRIPTION:
GATCAAAAGA AACTTAAAA GTGGAATGGG ATATGGCTTT TGGTACCTGA AAATAAATNC 60
TTTAATAATT GTAAGCCAGA AA 82

SEQ ID NO:2576
SEQUENCE LENGTH:82
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02958
SEQUENCE DESCRIPTION:
GATCAAAAAT ATAGTTATAA TTTTNTAAAT TTNAAAAATG TGATTGCNCT AATAAAGAAT 60
AAAANCTATG CTTTAAACA AA 82

SEQ ID NO:2577
SEQUENCE LENGTH:85
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02959
SEQUENCE DESCRIPTION:
GATCACTGCA GNTTCTAGGA CCCGGTTTCT TTTACTGATT TAAAAACAAA ACAAAAAAAA 60
ATAAAAAAGT TGTGCCTGNN AAAAA 85

5 SEQ ID NO:2578
 SEQUENCE LENGTH:81
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02960
 SEQUENCE DESCRIPTION:
 GATCTCCCAT AATTTGAAAT TGAAATCGTA TTGTGTGGCT CTGTATATTC TGTTAAAAAA 60
 10 TNAAAGGACA GAAACCTTAA A 81

15 SEQ ID NO:2579
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02962
 SEQUENCE DESCRIPTION:
 GATCCACCAT CTTATCTTGG TGCCATCCCT GACTTGGCTT CTGTTCATAA ATGCCTATTA 60
 20 AATGTTTCTT TCTGAGAAA 79

25 SEQ ID NO:2580
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02963
 SEQUENCE DESCRIPTION:
 GATCCAATTG CTGGTTACAT TTTGGGAAGC TCTCATTTTA GTGCTATGTA GTTTCATTGA 60
 30 ATAAACTGTT TAATATAAA 79

35 SEQ ID NO:2581
 SEQUENCE LENGTH:75
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02964
 SEQUENCE DESCRIPTION:
 GATCTAAGAG GAAAGTGGTT ATCGGTTGCN NTTTATTAT AAAGGATGCA AACATAAAAT 60
 40 TAGATTTTTG GCAAA 75

45 SEQ ID NO:2582
 SEQUENCE LENGTH:73
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02965
 SEQUENCE DESCRIPTION:
 GATCAGCCTT TTTGTTTCAA TGAGGTGTCC AACTGGCCCT ATTTAGATGA TAAAGAGACA 60
 50 GTGATATTGG AAA 73

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SEQ ID NO:2583
SEQUENCE LENGTH:72
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02966
SEQUENCE DESCRIPTION:
GATCCCAGAG TGGCCTGCCT ATCACAACCA CATCCCTTCC CCCCACAAGG CAATAAATCT 60
CATTTCTTTA AA 72

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SEQ ID NO:2584
SEQUENCE LENGTH:72
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02967
SEQUENCE DESCRIPTION:
GATCAACGAC AAAATGCACT TCTCCCTCAA GNAGTGAGGC TTGGTCCAAT ACATGGCTCT 60
GCCCCCAGA AA 72

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SEQ ID NO:2585
SEQUENCE LENGTH:72
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02968
SEQUENCE DESCRIPTION:
GATCAATCTT GTATTTTCTG ACCACATAAA GGCTTCTTCT CTTGTGAATA AAGTAGAAAA 60
GCTCTCCTCA AA 72

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SEQ ID NO:2586
SEQUENCE LENGTH:166
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02969
SEQUENCE DESCRIPTION:
GATCTTGTTT CTGAAGATGG TTAAAGTTAT AGCTTCTTAA ACGAAAGAAT AAAATACTGC 60
AAAATGTTTT TATATTTGGC CCTTCCACCC ATTTTAAATT GTGAGAGATT TGTACCAAT 120
CATCACTGGT TCCTCCTTAA AAATTAATAA GTAACCTCTG TGTAAA 166

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SEQ ID NO:2587
SEQUENCE LENGTH:71
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02970
SEQUENCE DESCRIPTION:
GATCATAGGA GAGACCCATT NGCTAGCTAC TTCATTGTT CTGACCTAAT AATAAAAGTT 60

AGAACCATAA A

71

SEQ ID NO:2588

SEQUENCE LENGTH:72

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02971

SEQUENCE DESCRIPTION:

GATCTGACGT TCCTTGTGAC TTAAGGGTCC GGCTTGGGAA TTAAAGTTTG TTTCTGGCCT 60

TTAGCCTACA AA 72

SEQ ID NO:2589

SEQUENCE LENGTH:70

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02972

SEQUENCE DESCRIPTION:

GATCTGGCCA GTCAAGGGTC CACAGGGTGC CAGCCTCTCA CCCTCAGAAT AAAGACATCA 60

GCCATTCAAA 70

SEQ ID NO:2590

SEQUENCE LENGTH:69

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02973

SEQUENCE DESCRIPTION:

GATCATCTAA ACTGAGTCCA GCTGCCTAAT TCTGAATATA TATATATATA TATATCTTTT 60

CACCATAAA 69

SEQ ID NO:2591

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02974

SEQUENCE DESCRIPTION:

GATCCTTATT ACAGGAAAAG CATGAGTGGT GGCTAACCTG ACCAATAAAG TTATTTTATG 60

ATTGCAAA 68

SEQ ID NO:2592

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02975

SEQUENCE DESCRIPTION:

GATCTTAGAT TTTATGTAGT ATTAAGTGAA AAAATACGAA AATAATAAAC ATTGAAGAAA 60

AAAATAAA

68

5 SEQ ID NO:2593
 SEQUENCE LENGTH:75
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02976
 10 SEQUENCE DESCRIPTION:
 GATCACATTT TCTGTTGGTT AACATTNTTC CTAGCTTATA TGATGGAATT AAATATATTC 60
 TGTGTAAAAA GGAAA 75

15 SEQ ID NO:2594
 SEQUENCE LENGTH:67
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02978
 20 SEQUENCE DESCRIPTION:
 GATCCACCTA ACAAGAAACC TAAAGTGTAG AGATTGCCAT TTTNATTGT AATTTTTTTT 60
 TTTTTTN 67

25 SEQ ID NO:2595
 SEQUENCE LENGTH:66
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02980
 30 SEQUENCE DESCRIPTION:
 GATCACACAC CGGCTGTATT TAATATGTAA CATTTTCACA NATATTAAAG ANACAGAAGT 60
 ATTAAA 66

35 SEQ ID NO:2596
 SEQUENCE LENGTH:65
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02981
 40 SEQUENCE DESCRIPTION:
 GATCAGCATG GGCCACGTAG NCGNGACTCC ATCTCTACAC ATAAATAAAA AATTAGCTGG 60
 GCAAA 65

45 SEQ ID NO:2597
 SEQUENCE LENGTH:63
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02982
 50 SEQUENCE DESCRIPTION:
 GATCCAATTT ATGTTTTTTC TTNTTTTATA TTTGGGGAA AATTAAAAAT TTTTAAAGGT 60

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SEQ ID NO:2598

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02983

SEQUENCE DESCRIPTION:

GATCACGCAA TAATGACTAT GTAATCTCAA AAAACAAATA AAATATTCTT AACATGGCAA 60
A 61

SEQ ID NO:2599

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02984

SEQUENCE DESCRIPTION:

GATCCAAGCA GTGTGCTACT ATATAACTGA TAAAAGCACT TGGTCTTNGA TTATCAGAAA 60

SEQ ID NO:2600

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02985

SEQUENCE DESCRIPTION:

GATCATTTTG CACATAGCTT TATCAACTTT TAAACATTAA TAAACTGATT TTTTAA 58

SEQ ID NO:2601

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02986

SEQUENCE DESCRIPTION:

GATCTTTGCA GTTTNGAC AATTACAAGT AAAGCTGCTA TAAACATTG TATGCAAA 58

SEQ ID NO:2602

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS02987

SEQUENCE DESCRIPTION:

GATCGACACG CAGCTAGCCT CCTGCATTGT ATGGTTATAA ATAGCACCT AGTGAGTNCT 60
GTCGTCCAGT CAAA 74

SEQ ID NO:2603

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SEQUENCE LENGTH:58
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
5 CLONE:HUMGS02988
SEQUENCE DESCRIPTION:
GATCCTGGGG CAACCATCT GGTCTTTGA ATAAAGGTCA AAGCTGGATT CTCGCAAA 58

SEQ ID NO:2604
10 SEQUENCE LENGTH:56
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02989
15 SEQUENCE DESCRIPTION:
GATCACGTTT CGTGTTTATA CTCAACGTTA ATAAAAGGAG AGAGTTTGTG GTGAAA 56

SEQ ID NO:2605
20 SEQUENCE LENGTH:55
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02990
SEQUENCE DESCRIPTION:
25 GATCGCTGTG CCTGGCATAT AGTAGGTGTT CAATAAATGC CCTGTGACTC TCAAA 55

SEQ ID NO:2606
SEQUENCE LENGTH:59
SEQUENCE TYPE:nucleic acid
30 TOPOLOGY:linear
CLONE:HUMGS02991
SEQUENCE DESCRIPTION:
GATCTATCCT CAACAACAAC AGAAAAAAGG AATAAATAT CCTTTGTTTC CTAGTGAAA 59

SEQ ID NO:2607
SEQUENCE LENGTH:54
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
40 CLONE:HUMGS02992
SEQUENCE DESCRIPTION:
GATCCATTTT AAAATTTGTA ATTCAATAAA GTTTTTTTTG TTGTTAAACA TAAA 54

SEQ ID NO:2608
45 SEQUENCE LENGTH:53
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS02993
50 SEQUENCE DESCRIPTION:

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 GATCTTGAT TCAGTCAGGT TAAACAACG GACAATAAAA GAATGAACAC AAA

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 SEQ ID NO:2609
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02994

10
 SEQUENCE DESCRIPTION:
 GATCTGGGT GGGAGTAACA GGCAGAAAT GATTAATG TTTGAGCACA AA 52

15
 SEQ ID NO:2610
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02995

20
 SEQUENCE DESCRIPTION:
 GATCCTTTT TTTTCCACA AAATTTTAC AAATAAAAAA TGTCCCTA AA 52

25
 SEQ ID NO:2611
 SEQUENCE LENGTH:52
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02996

30
 SEQUENCE DESCRIPTION:
 GATCTCAAAG TGCCTTCTGA AGCATCAGAG ATTAATATT GTTCAAATA AA 52

35
 SEQ ID NO:2612
 SEQUENCE LENGTH:53
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02997

40
 SEQUENCE DESCRIPTION:
 GATCTGAATG GGGCTTNCCT GATGTTGTA TCTAAGGCTT AGGCCTATAG ATN 53

45
 SEQ ID NO:2613
 SEQUENCE LENGTH:50
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS02999

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 SEQUENCE DESCRIPTION:
 GATCTTGAAT GTATTTCTT AAGTTTATTA ATAGACATT TCACAATAA 50

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 SEQ ID NO:2614
 SEQUENCE LENGTH:50
 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear
 CLONE:HUMGS03002
 SEQUENCE DESCRIPTION:
 5 GATCTATCTG GAAATGNAG GACTCCGAAT AAAAGCTAT TACTAATAAA 50

SEQ ID NO:2615
 SEQUENCE LENGTH:51
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03005
 SEQUENCE DESCRIPTION:
 15 GATCAGGGGA AATNTTTAAG CTAAATAAAT CTGGGGGGTT TTTTATTCAA A 51

SEQ ID NO:2616
 SEQUENCE LENGTH:165
 SEQUENCE TYPE:nucleic acid
 20 TOPOLOGY:linear
 CLONE:HUMGS03028
 SEQUENCE DESCRIPTION:
 GATCGAATGG TATATATTAG AAATTACATC TGTGTGAATT AAAATTGTGT GAGCAATTAA 60
 25 ACATGGTTGA NTTTTCAAG CAAAAATCAG TTCATCTTTT GATGTAATTT TCTAGGCTAA 120
 ATGGCAATCT CTGAAAGATG AATAAAGCTA TATTTATTTA GCAAA 165

SEQ ID NO:2617
 SEQUENCE LENGTH:254
 30 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03030
 SEQUENCE DESCRIPTION:
 35 GATCACATTT TAAGCATCTN TCTCTCCTAC TCCATTAGA AAAATAAGTA ACAGGTGAAA 60
 TGTGGTCTCA GTGTTAACGG GATAATTCTG CTACCGGCTC CTCCCTGATG ATTCTNAAAT 120
 AACTACTGA ACGAGCTCTG GCTGGTCCTT TCTATCCTGG ATGTGGTTCT TCTGTGTAGC 180
 AATTCCTTGA NGTCCAGGTT GGAAAGATGT ACTCTTCTCA ACCAAGGAAA ACCTTAAATC 240
 40 CCGTCGTGGC CAAA 254

SEQ ID NO:2618
 SEQUENCE LENGTH:271
 SEQUENCE TYPE:nucleic acid
 45 TOPOLOGY:linear
 CLONE:HUMGS03031
 SEQUENCE DESCRIPTION:
 GATCAACCCC AGACTGGGCC AGAATGTTAG TGAAGGTTTT ATTGTGCCCG GTTGGAGGAT 60
 AACGTTCTTT GGGTACTTTT TGTGGGTTGC AAATNAACTC AATTGCCACA AGTTTTAAAC 120
 50 TGGTGTAAT CAAGCTTGAC TTAATGTGAT TGTNACTGTT ATATCCAGNC TATACTGCTA 180
 GCAGCTGCTC ATACTGCAGT CAATTACTGG AAGCGGATAT ATTCCTATG CAAAACTGT 240

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TTAAACAATA AAATGAGCTA TGCTACAGAA A

271

SEQ ID NO:2619

SEQUENCE LENGTH:489

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03053

SEQUENCE DESCRIPTION:

10 GATCCACAGC TTAAAGATGG GAATTCAGGT ATGAAAGAAA ACAGGCAAGG AGGCACTGAG 60
 GGAGAAAGAC ACAGACTTTA TCGCTCTGTG GCTCATTGTT ACTGGAATAT NCTAAACTC 120
 TTGTNCACAT GCTATTATGA CTTATAAAGC AGCAACAGCT GAGGCGCACC AGGACACAGC 180
 TTCCATTTCT TTAACGTCTG TNCCCTTAAC ATCGCTGAAA TNATTACTG TTGAAGAGAT 240
 15 GCCTTGCGGT GTGGCCAGCT GTGAGGAGAA AGCAGCTGGC AGTGTTAGGA CATTAGTCCA 300
 CCTTCAGCGC AGGGTCTCTG GCCGGGTCTG ACTCAGAAAC CTTGGTACTC GNCCCTTGGN 360
 CACAGTGCCC AGACCCATGT AACCNACTNG NTCCTGCATT AACCNAGAAA TACCTCGGTT 420
 CTATNTGTGC ACTTAGCTGG GGAATTACCC ACTGTAATCA CCTNAATNAA NGGGTTNTAA 480
 20 ACATGGAAA 489

SEQ ID NO:2620

SEQUENCE LENGTH:471

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03055

SEQUENCE DESCRIPTION:

30 GATCCAAAAC GCTTCGAGGC ACCCCAAATN ACCTGCCCAT TCGTNAGGAN GACCCACCCA 60
 CCCAGTGTTA TATCTGCCT CGCCGGAGTG GGTGTNCCCG GGGGCACTTG CCGACCAGCC 120
 CCTTGCCTCC CCAGGTTTGC AGCTCTCCCC TGGGCCACTA ACCATCCTGG CCCGGGCTGC 180
 CTGTNTGACC TCCGTGCCTA GTCGTGGCTC TCCATCTTGT CTCCTCCCCG TGTCCTCAAT 240
 GTNTTCAGTG GGGGGCCCCC TCTTGGGTCC CCTCCTCTGC CATCACCTGA AGACCNCCAC 300
 GGCAAAANACT GAATGTAANC TGTGNCTGNN GNCTCGGTCC AACTTGCGGN CCGTGTNTNA 360
 35 CTNAACTNAG CTCCTTTAAC GGTAAATTTT CNGGGAAAAT CCCATGNTTG GGTTTTGGTC 420
 TTAAACCTTG GTAACGGTTG AAATCCAATT AAAGNTTTAA AAGTCATGAA A 471

SEQ ID NO:2621

SEQUENCE LENGTH:435

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03056

SEQUENCE DESCRIPTION:

45 GATCACCATT AAATCTGAAA GTACCTTTAA AAATACTGAG ATTNCCCTCA TACTGGGCCA 60
 GGNATTNAC GAAGNACCTG CAGATGACAG GAAAGTCAAG AGCACCATAA CCTTAGATGG 120
 GGGTGTCTTG GTACATGTNC AGAAATGGGA TGGAAAATCA ACCACCATAA AGAGAAAACG 180
 AGAGGNTGAT AAATGTTGGT TGGAATGCNT CATGAAAGGC GTCACCTCCA CGAGAGTTTA 240
 50 TGAGAGAGCA TAAGCCAAGG GACGTTGACC TGGACTGAAG TTCGCATTGA ACTCTACAAC 300
 ATTNTGTGGG NTATATTGTT CAAAAAGNTA TTGTNGTTTT CCATGGATTT AGCAAGCAAC 360

TAATTTTNTC CCAAGCTNGN TTTTTCCTCAA TANTGGTNAC GTTGGNTAAA TAAANNTTTT 420
TTTAGGNTTT TNAAG 435

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SEQ ID NO:2622
SEQUENCE LENGTH:411
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03058

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SEQUENCE DESCRIPTION:

GATCTCATCA GGGGAAGGCT CTGTGATGCT GCAGGTTGAT GTAGACACAG TAAAAGGAGG 60
GCTGAAGTTG AACCCCAACT NNCTGGTGGA CTTGCGGAAG GAGCCCCTTG GCCCAGCCCT 120
TGCCCATGAG CTCCGCTACC CTGGGGGCGA TTGTAGCTCT GACATCTGGA TTGAACTCC 180
15 ACCCTCATCA CCCCACTCC CTATTTTGGG CCCTCACTTC CTTGGGGACC TGGCTTCATT 240
CTGCTCTCTC TTGGCACCAG ACCCTTGGCA GCATGTACCA CACAGCCAAG CTGAGACTGT 300
GGCAATGTGT TGAGTCATAT ACATTTACTG ACCACTGTTG CTTGTTGCTC ACTGTGCTGC 360
TTTTCCATGA GTCNTTGAG GCACCAAGAA ATAAACTNGT AACCTGTAA A 411

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SEQ ID NO:2623
SEQUENCE LENGTH:410
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03059

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SEQUENCE DESCRIPTION:

GATCCAGGCG GGATGGAGTG TGGAGTGTGG GCACAGTGGC TTGTACAGGC CTGGNCTGGG 60
CAGACTTGCC CCGGAGTCTC AGGCCACTGC GGAAGGAGGA CGCGTGCCA GCAGGTGCCA 120
CCAGGAGAGG AGAGGAGGGC CAGGCTGAGC TGCATCTNTG GACTCCAAGG AGAGCTTGA 180
30 GAGGTGACTG AAACCTGACC CCACCCAG CCGTGTNTCA TCTGTGGGTC CTTGGGCAA 240
TTGCCATC TCTCTNAGCC TCGAATGCGT AGTTTCAGGA CTAAGTAGG TACTGTGTAC 300
CAACTGCCTC TGCCAACGGC CCGCACTGG GCANGCCTGG GGTACCTGG CTTTGGGGNA 360
AGGAAGTAGG CTTNGGNAG GAGGCTGGAT TGCTTACAAT TTTNTTTTN 410

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SEQ ID NO:2624
SEQUENCE LENGTH:408
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03060

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SEQUENCE DESCRIPTION:

GATCTGCGGC CCATCTACAT CTCTGTGCAG CCGCCTTCAC TGCACGTGCN GGAGCAGCGG 60
CTGCGGCAGG CATACTGA AACCGAGGAG AGCCTGGTGA AGCGGCTNGC TGNTGCCAGG 120
45 CCGACATGGA GAGCAGCAAG GAGCCCGGCC TGTGTGATGT GGTTCATCATT AACGACAGCC 180
TGGACCAGGC CTACGAGAG CTGAAGGAGG CGCTCTCTGA GGAAATCAAG AAAGCTCAA 240
GGACCGGCGC CTGAGGCTTG CTGTCTGTTT TCGGCACCCC GGGCCCATAC AGGACCAGGG 300
CAGCAGCATT GAGCCACCCC CTTGGGAAGG CGATACGGCA GCTCTGTGCC CTTGGCCAGC 360
ATGTTGGAGT TGGAGGAGAT NCTTGCCCT GTTGGTTTGG ACCATCCN 408

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EP 0 679 716 A1

SEQ ID NO:2625

SEQUENCE LENGTH:398

SEQUENCE TYPE:nucleic acid

5

TOPOLOGY:linear

CLONE:HUMGS03061

SEQUENCE DESCRIPTION:

GATCTCAACG AGACAAACGA TGGGTGGACC CGAACTCCCC GGTGCTCTTN GAGGACCCAG 60
 TCCTTTNTGC CTTGGCAAAA AAGCACAAGC GAACCCAGC CCTGATTGCC CTGCGCTACC 120
 10 AGCTGCAGCG TGGGGTTGTG GTCCTGGCCA AGAGCTACAA TNAGCAGCGC ATCAGACAGA 180
 ACGTGCAGGT TTTTNANTTC CAGTTGACTG CAGAGGACAT GAAAGCCATA GATGGCCTAG 240
 ACAGAAATCT CCACTATTTT AACAGTGATA GTTTGTCTAG CCACCCTAAT TATCCATATT 300
 CAGATGANTA TTANCATGGA GGGCTTTGCC TGATGGTNTA CCAGAAGCCC TGTGTGTGGN 360
 15 TGGGTGACGC AGAGGGACGT CTCTNTGCCG GTGACTGN 398

SEQ ID NO:2626

SEQUENCE LENGTH:394

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03062

SEQUENCE DESCRIPTION:

GATCACAGCT GGGGGA AAAA AAGCTTTTTA ATTCTGTACC TTCCTAGTAG ATAAGTGAAG 60
 25 AGCAGGGAAA GAGACCTTTA AATATTTTNC TATAAAAAA TTTGTGATAA GTTCTATCA 120
 AAATGGGGAG ATTGCAGAAA AGGCTTCCCT TGGNTCCAA GGAGGTGTAG CAGGTGTGAG 180
 CAATATTAGT GCCATGTGCC TTTCACACAG GGTTCGATT TATCAGTCTG TTTCCGATG 240
 NNNNGGTACA TGAAAGAGTA CACCATGTGA AGAGAAGAGA GAATGATTGA AAATGTTTTA 300
 GTATAGACCT CTCTTGCAG TGGGTGCTA TTTCTAGAT TTTACTTTTT AGGGACCAAA 360
 30 NTAAANTCCT TTGTAAACN TGGGTCAGNG NAAA 394

SEQ ID NO:2627

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

35

TOPOLOGY:linear

CLONE:HUMGS03063

SEQUENCE DESCRIPTION:

GATCGCACCA TTAACTCCA GCCTGGGTGA CAGAGAGAGA CCCTGTGCCN NTCAAAAAA 60
 40 TGTTTTTTTT AAACAAGAAT CTCTCAGGCA TACTGAAATN TTGAAGAGGA AATNATATTA 120
 ATATCTGGGA CTTGTTTCCA AATTGGAAAT TGGGGCAGGG TGTAATNGT TGGCAATATC 180
 AAAGAAACGA GGAGTTGGAA TNATAATTGT AGAAGCTGCA TGATAGATAC ACATTCTTTA 240
 TACTTCTGTA TATGTNGAAA TTTTNNATCA AATTATAATN GTGTATAATG ACTAATTATG 300
 45 CTTCATTGT CTATCCTGTG TGGTATGTN ACTTGCTGAA ATNNATACAT AANGGTCTT 360
 CAACCTTNAN NTGGTCTTAT CCANGGCATA NN 392

SEQ ID NO:2628

SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03064

SEQUENCE DESCRIPTION:

5 GATCTGTAAT NATCTCTATT GGCCTGGGGT GCCTGTGCTA TAAATAAGTT TCTTCACATG 60
 AAAACACAG CCAGCCCAAG ATNACTTATC TGGGTTTAGG ATTCAATAGT ATTCATAAC 120
 TGCTTATNAC ATGAGCAATT TCATCAAATC TCCAAACTCT TAAAGNATGC TTTCGGAAAA 180
 CACGCTGTAT ACCTAGATGA TGAATAATG CAAAATCCTT GGGCTTTGGT TTTTCTTAG 240
 TAAGGATTTT AAATAACTGC CGACTTCAAA AGTGTTCTTA AAACGAAAGA TAATGTAAAG 300
 10 AAAAATTGGA AAGCTTTGGA AAACCAAATT TGTAAATCA TTGTATTTT NATTAAAAAGT 360
 TTTGTAATAA ATTTCTAAAT TTAAT 385

SEQ ID NO:2629

15 SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03065

SEQUENCE DESCRIPTION:

20 GATCGGGGCC CTGGGCTGT NAGACCCCGA CCNTCTCGAG GAACCCTGCC TGAAACGCCT 60
 CCATTACCAC TGCAGCTGA GATGAGGGGA CTCACAGTTG CCAAGAGGGG TCTTTGCCGT 120
 GGGNNGGNTC GCCAGCCACT CACCAGCTGC ACTGAGAGGG GAGGTTNGCA CACCCCTCCC 180
 CTGGGCCGCT GAGGCCCGCG CACCTGTGCC TTAATCTTCC CTCCCTGTG CTGCCCGAGC 240
 ACCTNCCCGC CCCCTTACT CCTGGGAAT TGCAGCTGC CCTCCCTNC CCGTTTTTAA 300
 25 TGCCCTGCTG AAATATGTGT GTGAAGAATT ATTTATTTTC GNCAAAGCAC ATGTAATAAA 360
 TGCTGCAGNC CNGCCTNTGC CCAA 385

SEQ ID NO:2630

30 SEQUENCE LENGTH:385

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03066

SEQUENCE DESCRIPTION:

35 GATCCCGGGN AGTNACAGGT GCCGACGTGA TGTCGCTTCT NTGGTGCCCA GCTCCCTTCC 60
 TGGTCTNANA CTAGCTCTGG GGGTGGCGGG GGGCCCCACA CGCTGCTCCC GCTCCACCCT 120
 GCGCGTCTG CTGCTCTGTG CCTGCTGTCA GAGCCCTGGT GGGGGAGGAT GTGGCCACCC 180
 TGAGACCCGG AGGAGACGGG CGTCTGCCTG GNTTTCGGA GAGCNGCTTA TGGGTGTGGT 240
 40 CCGTCCAGAC ACCTTGTTTC AAGGGGGATG GCGTNANGG GCAAGCAGAG CATCCCCACC 300
 GNTGAGCAAG AACTTTTTCT TGTTTTAAA CCATCACGTC CTCATTTTAC AATTGGAATA 360
 AAGTGAGTTT TTTGAAACC TGAAT 385

SEQ ID NO:2631

45 SEQUENCE LENGTH:381

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03067

50 SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

5 GATCGCAAGG AACTGGGCGG CCTACTACCC CGACCTGCCC ACCCCAGAAC AGCAGCAAGA 60
 CATGGCCAG TTCATACATT TATTTCTAA GTTTTACCCC TGTAAGGAGT GTGCTGAAGA 120
 CCTAAGAAAA AGGTTGTGCA GGAACCAACC AGACACCCGC ACCCGGGCAT GCTTCACACA 180
 GTGGCTGTGC CCCNTGCACA ATGAAGTGAA CCGCAAGCTG GGCAAGCCTG ACTTCGACTG 240
 CTCAAAAGTG GATGAGCGCT GGC GCGACGG CTGGAAGGAT GGCTCCTGTG ACTAGAGGGT 300
 GGTCAAGCCAG AGCTCATGGG ACAGCTAGCC AGGCATGGTT GGATAGGGGC AGGGCACTCA 360
 TTAAAGTGCA TCACAGCCAA A 381

10 SEQ ID NO:2632
 SEQUENCE LENGTH:370
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS03068

SEQUENCE DESCRIPTION:
 GATCCGTAAG TCCATGACCA AGGAGGCCAT CCGAGAGCAC CANATGGCCC GCACTGGCGG 60
 CACGAGACAG ACCTGTNCAC CTGCGGCAAG TGCAGGAAAA AGAACTGCAC CTACACACAG 120
 GTGCAGACCC GCAGCTCTGA TGAGCCCATG ACCACCTTTN TTGTCTGCAA CGAGTGTGGA 180
 20 AACCGCTGGA AGTTCTGCTG ACCCCTCGTG TAGATGTGCT GCAGCCTTGG GCCCTCCCCG 240
 GCCCAGCTCC TCCGTTGACA CAGCTTCTNT GGAGACCCTA GAAGGCGGCA TGTCTGCCCC 300
 TCAACCTGCC TGCNTGGATT GCACCTTTCT GCCCTTTCCC CNTNATTATT AAATGTTTCT 360
 TTTTGCCAAA 370

25 SEQ ID NO:2633
 SEQUENCE LENGTH:344
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 30 CLONE:HUMGS03069

SEQUENCE DESCRIPTION:
 GATCTTCTTC AAGCCATTAT TTAACTCAA GAAACTCTA GAGAAGAAAA GTGAAGAAGT 60
 CATGTTGAAG AAGATGTAAG AATGTGTCAA GACCATCCAG AAATNATATG AGAAATACTG 120
 35 ATATTTTAAA TGGTTGACAT CATCCAGCGA AATGAATCTA CATTAAATGT TGTTTTAACT 180
 GCGCTATGAT TAAAACCAT CATATAGAGT TAGTNTTAC AACTACTATT CTGTTATTTT 240
 TTTTAAATC TGACAACATT TGTCTAAGT AAGATAAGCA AAAAAATTCT TCAACTCCTT 300
 TTGGCAAGAA AACTGTAACA GAAAATAANT TTTGAATGTG TACN 344

40 SEQ ID NO:2634
 SEQUENCE LENGTH:341
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 45 CLONE:HUMGS03070

SEQUENCE DESCRIPTION:
 GATCCCTGGT CCAGAATTCC ATTTACCTTC TGGGCCAGAT ACCACCAGAA TGCCCGCTCC 60
 ANATTCCCTC AGACCTTTGC CGGTCCCAT ATTGGTCCTG GTGGTACAGC CAGTGCCAAAC 120
 50 TTCGCTGCCA ACTTTGGTGC CATTGGTTTC TTCTGGGTTG AGTGAGATGT TGGATATTGC 180
 TATCAATCGC AGTAGCTTT CCCCTGTGTG AGGCTGAAGC CTCAGATTCC TTCTAAACAC 240

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AGCTATCTAG AGAGCCACAT CCTGTTGACT GAAAGTGGCA TGCAAGATAA ATTTATTTGC 300
TGTTCCTTGG GCTACTGNTT TTTTCCCCT TGTGTGCTGT N 341

5 SEQ ID NO:2635
SEQUENCE LENGTH:340
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03071
10 SEQUENCE DESCRIPTION:
GATCGNCAAG AAAATTNAGA TTGGCGATGG GGCAGAGCTG ACGGCAGAGT TCCTCTACGA 60
CGAGGNGCAC CCCAAGCAAC ACGNCTTCAA GCAGGCCTTC GCCAAGCCCA AGGGCCCAGG 120
GGGCAAGCGG GGCCATAAGC GCCTCATCCG NGGCCCGGGT GAAAATGGGG ATGACAGCTA 180
15 GGAGGCTGGA GCATNNGNCG GCCACGNTG GACTGTGGGG CTGCCCACCT TCCGCTCCCT 240
GCCACCATCC TCCTTCCTGG GCTCCAGGAA AGTNTTCTG GGAGGTCAGG AGGGCTGGCA 300
GCTTGAACGC ACTTGCAGCG TCCGANGGNC ACCGGGCTTN 340

20 SEQ ID NO:2636
SEQUENCE LENGTH:335
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03072
25 SEQUENCE DESCRIPTION:
GATCTGTCTG CNTTCCTCAA GACCATTGCA CTGAATGGTG TGGAGGACGT GCGAACCGTG 60
CTGGAGCACT ATGCCCTGGA GGATGACCCG CTGGCGGCTT TCAAACAGCG GCAAAGCCGG 120
CTAGAGCAGG AGGAGCAGCA GCGCCTGGCC GAGCTCTCCA AGTCCAACAA GCAGAACCCTC 180
TTCCTTGGCT CCTCACCAG CCGCTTGTGG CCTCGCTCCA AACAGCCCTG AACTCTGGGC 240
30 CTCCTCAAAC TCAGTGCTG GGTCCAGGGC CCCAGTGCTT CCAGACCAAG ACTTGGGCCA 300
CCACTTNTCC AATAAAGTAC ATCCGAGACG GCAAA 335

35 SEQ ID NO:2637
SEQUENCE LENGTH:332
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03073
40 SEQUENCE DESCRIPTION:
GATCCAGTTG TGAACAAAGA GTCCTCTTNG TGGAAAAGAA AAAAATACAT NTCCCTTTAA 60
ACGGTGGATT GAAAATAACT TTNATTTATA AAGAGAAGAC TGAGGGCGGG GATACTGATT 120
CANNAATCCT GTAGCGTGTA ATAAAAGAAG AGGAAATGGC ATGGAATCAC TGCCTCCTGT 180
GATTTGAAGG CCATTGTGAA GGAACAAT GCAGTGAAG AAAGTTCTTC ATATTAGGCC 240
45 AGATATCATT GCATCACATT TATTTATCTT TCTGGNATTT TTATAGCCCT TAATAAAAAA 300
TATTAAATA GCCTGTGCTA TTGTGTCTTA AA 332

50 SEQ ID NO:2638
SEQUENCE LENGTH:335
SEQUENCE TYPE:nucleic acid

55

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS03074

SEQUENCE DESCRIPTION:

5 GATCAAGAAT TTGGTGTGGA CGTTGGCCCT GTTTGCTTTT TATAAACCAA ACTCTATCTG 60
 AAATCCCAAC AAAAAAATT TAACCTCCATA TGTGTTCTC TTGTTCTAAT CTGTCAACC 120
 AGTGCAAGTG ACCGACAAAA TTCCAGTTAT TTATTCCAA AATGTTTGGA AACAGTATAA 180
 TTTGACAAAG AAAAATGATA CTTCTCTTTT TTNGCTGTTT CACCAANTAC AATTCAAATG 240
 CTTTNGTTT TATTTTTTTT ACCAATTCCA ATTTCAAAAT GTCTCAATGG GGCTATAATA 300
 10 AATAAACTTT CAACACTCTT TTATGGTNAA CCAA 335

SEQ ID NO:2639

SEQUENCE LENGTH:384

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03075

SEQUENCE DESCRIPTION:

20 GATCAAGCCT GCCTCAATCA GTATTCATAT TTATAGCCAG GTACCTTCTC ACCTGTNAGA 60
 CCAAATTNAG CTAGGGGGGT CAGCCAGCCC TCTTCTGACA CTA AACACC TCAGCTGCCT 120
 CCCCAGCTCT ATCCCAACCT CTCCCACTA TAAACTAGG TGCTGCAGCC CCTGGGACCA 180
 GGCACCCCA GAATGACCTG GCCGCAGTGA GCGGATTGA GAAGGAGCTC CCAGGNGGGG 240
 CTCTGGGAA GACTCTGGTC AAGAAGCATC GTGTCTGGCG TTGTGGGGAT GAACTTTTTG 300
 25 TTTTGTCTC TCCTTTTTTA GTTCTTCAA GATAGGGAGG GNAGGGGGGA ACCATGAGCC 360
 TTGTTGGCT AATCANTCCC AAGN 384

SEQ ID NO:2640

SEQUENCE LENGTH:352

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03077

SEQUENCE DESCRIPTION:

35 GATCAAAGGT TTAAAGTCTA ACTTCTAAGA TATATTTGCA GAAAGAAGCA ACATGACAAT 60
 AGAGAGAGTT ATGCTACAAT NATTTCTTGG TTTCCACTTG CAATGGTTAA TTAAGTCCAA 120
 AAACAGCTGT CAGAACCTCG AGAGCAGANC ATGAGAACT CAGAGCTCTG GACCGAAAGC 180
 AGAAAGTTTG CCAGGNAAAA AANNGGCATC ATTATTACCA TCGATTCACT GCCTGGTTAA 240
 NGNGGNAAGC TTACTTNGTT TNAGTGGCAG CCNCNTNGCA CGTGGTTTGC TATGNAGGTG 300
 40 AANGGTTTCC CAATTCCTTC AGGCTTTTTN GGGGGTTTTT GGGCTCTNCC TN 352

SEQ ID NO:2641

SEQUENCE LENGTH:321

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03078

SEQUENCE DESCRIPTION:

50 GATCAAACAG CTCTAAGTAT GAAGCAAGAG TAAAGACTAA GTTTTCGAGA NCATTCCTAC 60
 TCACATAAGT GAAGAAATCT GTCAGATAGG AATCTAAATA TTTATAGTGA GATTGTGAAA 120

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EP 0 679 716 A1

5 GCAACCTTAA AGTTTGAAG AAGACTGATG AGACTAGGTG CNNNGCTTCC TTTCATCAGG 180
TATCTTTCTG TGGCATTGGA GAACAGAAAC CAAGAAACAT GGTAATTNCT AANTTATGAG 240
GCTTTGCTTT TTGTTTGCTT TTAAGTAGAA AACCATGTTG GCAACATTGA GTTTTGGNGT 300
TGATTGAGAT AATATGNCCT N 321

10 SEQ ID NO:2642
SEQUENCE LENGTH:320
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03079
SEQUENCE DESCRIPTION:
15 GATCTTTGGC TGGAAACTA GAATTATAG CAGTTTATTA ATGATACCTT AAATNACTCA 60
GGACTTAATG TAGCATTGCA CTTCTGTGTA CAGTAAACT GCTTTGTTTT ACTAAAGAGA 120
AAAATGTGAG TGGAAAAAAT ATGTATGTGT TATATACTCA AATGTATATA ATNCTATCTA 180
TAGATTTATA TATGTATACA TTCTGTACAG TAGTTCCATC AAAATATGTA ATAATTCA 240
CCAATTTTAT TAAATGTATT TNCTTTTCA AAATTTAAAT TGAGCTGCTA TCAATATTAA 300
20 ATGAAGTTAT GGCATCTAAA 320

25 SEQ ID NO:2643
SEQUENCE LENGTH:303
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03080
SEQUENCE DESCRIPTION:
30 GATCCCTTCG ATGTGGATTC AGGGAGAGAG TTTGGAAACC CCAACAGGCC TGTGGCATGC 60
ACCCGGCTGC CCTCGGACAC TGATGACAGT GATGCGTCTG AGGACCCAGG GCCTGGCGCC 120
GAGCGCGGAG GAGCCAGCAG CAGCTGCTGT GAAGAGGAGC AGACGCAGGG ACGGGGGGCT 180
GAGGCCAGGG CCCC GGCTGA GGTTTGAAA GGAATCAAGA AACGGCAGAG AGACTNAGGG 240
TTGCAGACAC ATATATTTT GAGGCTGGGT GACGAGAAAA TCTAGAGACA TGAGGGACAT 300
AAA 303

35 SEQ ID NO:2644
SEQUENCE LENGTH:315
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
40 CLONE:HUMGS03081
SEQUENCE DESCRIPTION:
GATCCAGACG CAAGANGGCT GTCCTCTCTA AGGAATATGG TTTTNNCTT CTAAGTGGT 60
CTGCCAGCTT TATAATGGTG GCCACCTAG CCATCANTGT TTCCAAGGCC CGCAAGANGT 120
45 ACAAAGTGGA GTATCCTATC ATGTACAGCA CGGACCCTGA AAATGGGCAC ATCTTCAACT 180
GCATTACGCG AGCCACACAG AACACGTTGG AAGTGTATCC TCCCTTCTNA TTTTNNCTAG 240
CTGTGGAGG TGTTTACCAC CCGCNTATAG CTTCTGGCCT GGGCTTGGCC TGGATTGTTT 300
GGACGAGTTC TTTAN 315

50 SEQ ID NO:2645

55

SEQUENCE LENGTH:314

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03082

SEQUENCE DESCRIPTION:

GATCCTTCTT GGGCCAGAA AGTCATTTGG CATGGCTCCA GGGCCATGG CATCCGCTTN 60
 TGGATAACTA CTGTGAAGCA TGGCGAACCG CGGACACAGC GGTACGGGA CTTGCCTCCC 120
 CGCTGAGCAC GGGGAAGATT CTGGACCAGA AAGCATACAG CTGTGCTAAT CGGGCTAATT 180
 10 GTCCTATGTA TCGAAAACAG TTTTCATGNCA GNCGTTAGGA AGTAATTGGC TTCTTNATGA 240
 TTCTTAAAN GNGTTTTCAA TTTTCCTAA TGNGAAGNGT TGNCAGTGA ATCTAAATG 300
 TTTANTTGTG NAAA 314

SEQ ID NO:2646

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03083

SEQUENCE DESCRIPTION:

GATCACTGTG GACAGGGTGC AGCTCTACCA GTTCCTGTTT CTNCTGAGCC AGACCCTCTT 60
 CAGGGAAGGG ACCAATTAAT TTTAAACTC ACTTGAAGCA CAGCTGGTCA TGGGGCTTGG 120
 TATAAAGTTC CTATTTCCAC CCTGATACTT CCAATTCCTG GAACCCAGC CCACTCCNCC 180
 25 ATCCCTCCTC CCTATCAAAC TAGTATAATG ATTTGAATC GGTACAGTGT GTTAACTGT 240
 AACTAAGTTC GACAGACTAT TATTATCTTT GTAATAAATT AACCTAGCAA TAAAAATTAT 300
 TCTGTNTAAA 310

SEQ ID NO:2647

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03084

SEQUENCE DESCRIPTION:

GATCTATTAA GCTTGANACA TTANGTNTCA TCACGCACTG AAGACAGGAA GCAGTTCCT 60
 GAGTCAGCTG GTTCCAAGC TCGCACAGAA GGTGATAAGT TACTATCAAA TGCCAGTNAG 120
 AATCTNCTTA TAGAATAACC TGGGCCCAAG TNATTTTNGT AAAAACTTG CCCTTCTTTG 180
 GTTTAATTTN CTATGTGCTT TTAGGTGTGA ATCCAGATAT GCGGTCTTAA TTCCTTTGGA 240
 40 AATACACAGT TCGTTTAGTT ACTGTACACT CTGTTTGTTT AATAAACTGC ATATCANCTT 300
 CCNACAAA 308

SEQ ID NO:2648

SEQUENCE LENGTH:302

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03085

SEQUENCE DESCRIPTION:

50 GATCAGCAGC CCCTGAGCGG AGAAGAGGAG CTAGAGCCTG AGGCCAGTGA TGGTTCAGGC 60

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5 TCCTGGGAAG ATGCAGCTTT GCTGACGGAG GCCAACCTGC CTGCTCCTGC TCCTGCTTCT 120
 GCTTCTGCCC CTGTCCTAGA GACTCTGGGC AGCTCTGAAC CTGCTGGGGG TGCTCTCCGA 180
 CAGCGCCCCA CCTGCTCTAG TTCCTGAAGA AAAGGGGCAG ACTCCTCACA TTCCAGCACT 240
 TTCCACCTG ACTCCTCTCC CCTCGTTTTT CTTCAATAA ACTATTTTGT GTCAGCTTCA 300
 AA 302

10 SEQ ID NO:2649
 SEQUENCE LENGTH:302
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03086
 SEQUENCE DESCRIPTION:
 15 GATCAGCGAG CTACCANGAC CAGAGACCAA CTCAAGCTAC AGCAGAAGNA TTTTCCCAAG 60
 CCTGCTGACC ACAGTCACAT CACCCATCAG CACATGGAAG GCCCCTGGTA TGGACACTGA 120
 AAGGAAGGGC TGGTCCTGCC CCTTTGAGGG GGTGCAAACA TGAAGAGCCA 180
 GAGGCTGTGT AGAGGCTCCT GCTCCACCTG CCAGTCTCGT AAGANATGGG GTTGCTGCAG 240
 TGTGGAGTA GGGGCAGAGG GAGGGAGCCA AGGTCCTCC AATAAAACAA GCTCATGGCA 300
 20 AA 302

25 SEQ ID NO:2650
 SEQUENCE LENGTH:303
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03087
 SEQUENCE DESCRIPTION:
 30 GATCCCAGCT GATGTAGACC CTCTACCAT TACTTCATCC CTGTNATCTG ATGGGGTCCT 60
 CACTGTGAAT GGACCAAGGA AACAGGTCTN TGGCCCTGAG CGCACCATTG CCATCACCCG 120
 TGAAGAGAAG CCTGCTGTCA CCGCAGCCCC CAAGAAATAG ATGCCCTTTC TTGAATTGCA 180
 TTTTTTAAAA CAAGAAAGTT TCCCCACCAG TGAATGAAAG TTTTGTGACT AGTGCTGAAG 240
 CTTATTAATG CTAAGGGCAG GCCCAAATTA TCAAGCTAAT AAANTATCAT TCAGCAACAG 300
 35 AAA 303

40 SEQ ID NO:2651
 SEQUENCE LENGTH:296
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03088
 SEQUENCE DESCRIPTION:
 45 GATCTCAGCT GGAAGTTCTG TTTGGAGCCC ATTTCTGTNA GACCCTGTAT TTCAAATNTG 60
 CAGCTGAAAG GTGCTTGTAC CTCTAATTC ACCCCANAGT TGGAGTTCTG CTCAAGGAAC 120
 GTGTGTAATG TGTACATCTG TGTCCATGTG TGACCATGTG TCTGTNAGGC AGGGAACATG 180
 TATTCTCTGC ATGCATGTAT GTAGGTGCCT GGGGAGTGTG TGTGGGTCCT TGGCTCTTGG 240
 CCTTCCCT TGCAGGGGTT GTGCAGGTGT GAATAAGAG AATAAGGAAG TTCAAA 296

50 SEQ ID NO:2652

55

EP 0 679 716 A1

SEQUENCE LENGTH:291
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03089
 SEQUENCE DESCRIPTION:
 GATCTNACGG CCAGGCCTCT NTCCTGCTGC TGTTTTTAAT TTTCCAGGT AGTGGGAGAG 60
 AGGAAAGGAG GGAAGGCAAG ATTCTTTCCC CCTCCCTGCT GAAGCATGTG GTACAGAGGC 120
 AAGAGCAGAG CCTGAGAAGC GTCAGGTCCC ACTTCTGCCA TGCAGCTACT ATGAGCCCTC 180
 GGGGCCCTCT CCTGGGCCTC AGCTTGCCCA GATACATACC TAAATATATA TATATATATA 240
 TGAGGGAGAA CGTNTCACCC AGNTTNNATC ATGCTGGAAA GAGTGTATGT N 291

SEQ ID NO:2653
 SEQUENCE LENGTH:290
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03090
 SEQUENCE DESCRIPTION:
 GATCTAAAGG GTGTAAAAAT ATTGATACTT CAATATTTCA CTTGCTGCCA GGAAAAACAA 60
 AATTCTCAAT CTTTGTAAA TGGGAGGAGG ACTTTTGCAT ACATTTTAC TCTTTAAATA 120
 ACGACAACGA CACTTATACT GTCATAATAA CAATNATGTA TTTCTTTGTG GTTTTAATTT 180
 TTTTGTGAAT TTACATAAA ACAGTTATTT TCTATTTTNA CGCAGATAAA TATTTGTGCA 240
 TAAAATGTAA AAATAGTAAA ATGAGAAAAA TAAACTATT ATACAGTAAA 290

SEQ ID NO:2654
 SEQUENCE LENGTH:287
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03091
 SEQUENCE DESCRIPTION:
 GATCTGTCCT CAGCTCTGGA CCCAATTCCC CTTACTTCAT TTTGGCAAAC ACTAAGTCAA 60
 ATAGTGAAAT GCCTGTCACT ACATAGAACC TATTACCTGG GGCAAATACG AACAGATTGA 120
 GTTTCCTTCA TCTTGTGTAA ATATGATGAA ACAGAGACCT GGTAACTTGG TGACACTGTT 180
 AAACCCTTTT NGGGATAAAG CCAAATGTAA ATGGAAACAT TAAACAGATA ANTTGTGGTG 240
 TTGAGACTTT TCTGAATTGA GAAAAATAAA TGTAATTTTG GAAGAAA 287

SEQ ID NO:2655
 SEQUENCE LENGTH:287
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03092
 SEQUENCE DESCRIPTION:
 GATCTGACCG GCTTCAAGCT CAAGCCCTAC GTGAGCTACC TCGCCCCCTNA NGAGCGAGGA 60
 GACGCCCCCTG ACGGCCGCGC ACTCTTTCAG CGAANCNGTG GCGCCTGCCA TCGAAAAGNA 120
 CTTCAAGGAC GGTACCTTCG ACCCTGACAA CCTGGAAAAG TACGGCTTCG AGCCACACA 180
 GGAGGGAAAAG CTCTTCCAGC TCTACCCAG GAACTTCCTG CGCTANTGGG CGGGGGAGGG 240

GCGGCCTGCC CTCATCTCAT TTCTATTAAA CGNCTTTGCC AGCTAAA

287

SEQ ID NO:2656

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03094

SEQUENCE DESCRIPTION:

10 GATCGTGGAG GAGGGACAAC GCTGCCACCG NTTGCTGTC AACACGTGCC CCTACGTGCA 60
 CAACATCACC CGCAAGGTAA CAAATCGGAA GTACCCAAAA CTGAAAGAAG TGGATGATGT 120
 GCTTGGTGA GCAGCTGCCT GGGAGANTGT TGA CTCTACT GCAGAGTCGT GTCCCAAATG 180
 CGAACATCCT CGTGCTTACT TCATGCAGCT TCAGACCCGC TCTGCAGATG AGCCGATGAC 240
 15 CACCTTCTAC AAGTGCTGCA ATGCTCAGTG TGGACACCGC TGGNGGGATT NGGGNCAGGT 300
 NTGGCCAGC TGCCCTNGTG TGTGCTTGCC TTGTNCCTCN N 341

SEQ ID NO:2657

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03095

SEQUENCE DESCRIPTION:

25 GATCCACAAG GTTGTCTGCT AAACCTGCTC CTCCAAAGCC ACAGCCCAAG CCTAAAAAGG 60
 CCCCTGCAAA GAAGGGAGAG AAGATACCCA AAGGGAAAAA GGGAAAAGCT GATGCTGGCA 120
 AGGAGGGGAA TAACCCTGCA GAAAATGGAG ATGCCAAAAC AGACCAGGCA CAGAAAGCTG 180
 AAGGTGCTGG AGTTGCCAAG TGAAGTGTGT GCATTTTGA TAACTGTGTA CTTCTGGTGA 240
 CTGTACAATT TCAAATACTA TTTTATCA AGTTTAAA 279

SEQ ID NO:2658

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03096

SEQUENCE DESCRIPTION:

40 GATCTGAATG TNCAGTTCTA GCCAAGGTAG ATTTTACTTT CAACTTTTTA ATCAGTATCA 60
 CTTTCTGTGC TTAATATTT GGTGTTACCT TGTCTGTTT CATTGTCTA AAATNCTGTA 120
 GAGATGACTA AAATTTGACA TAATGGTGTA AATGGATTGT NAAGGTAAT TTCAGTTGAN 180
 GATTAANGCA AGANGCCATT TTCCCATGA CTTTGGTTT GTTTACATT TNCCCTTTCA 240
 GTTAGTATAC ACTACACGTA CTGTAATAAA GTNCAATAN 279

SEQ ID NO:2659

SEQUENCE LENGTH:274

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03097

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCTTTNCT AAAGCAAGGC CTTGAGCAAG TAGGTTGCTG TCTCTAAGCC CCCTTCCCTT 60
 CCACTATNAG CTGCTGGCAG TGGGTTTNTA TTCGGTTCCC AGGGGTTGAG AGCATGCCCTG 120
 TGGGAGTCAT GGACATGAAG GGATGCTGCA ATGTAGGAAG GAGAGCTCTT TGTGAATGTA 180
 AGGTGTTGCT AAATATGTTA TTGTGGAAG ATGAATGCAA TAGTAGGACT GCTGACATTT 240
 TGCAGAAAAT ACATTTTATT TAAATCTCC TAAA 274

10 SEQ ID NO:2660
 SEQUENCE LENGTH:259
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03098
 SEQUENCE DESCRIPTION:
 15 GATCTGCCTG CNTTGGCCTC CCAAGGTGCT GGGATTACAG GTGTGAGCCA CCACCCCCAG 60
 CCGCCTCTAT GCTTTTGGNT TCTTTGATAT ATCTAACTT AAGGTCAGAA CAGAAATTCA 120
 TGTGCTGAAC AGAATGGATT CTTTTGTCAG TACCAATCCA ATTGAATCCT CTTTTATTT 180
 TCCTGCGTCC TTACCAGTCA CTTTGATAGT GCTAACTAAC CTACACTATG GGGGTTATTC 240
 ATGANTTAAG TATGATAAA 259

20 SEQ ID NO:2661
 SEQUENCE LENGTH:272
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03099
 SEQUENCE DESCRIPTION:
 GATCTGTGTT TGTAATACTG GTTGTAATTA ATTTTTTTAA TTCATGAACN AGCGGAAAAT 60
 TTATTAAATT AACTATTAAC CACATTCACC TTGTAAATGA CTGTATAAAA CTNGTNGACA 120
 30 ATGCACTGAC TTTAGAAAAG TGTTAATGTG CATAANTNGA GTGTAAATAA NATAGTGTG 180
 ATGTACTGAN ATATGACCTG TATAANNNGT ATTAGTAATT GTNTATGGGG TGTACCTGTT 240
 TATCTGTAAC TGTNATCCAA ACAAATNAAA TN 272

35 SEQ ID NO:2662
 SEQUENCE LENGTH:270
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03100
 SEQUENCE DESCRIPTION:
 GATCTATCTG GNNTGTGCNT TAGACTNGAT GAGAAGGTGT GAACTCTGCA GAAAGTCTCT 60
 CCTTCATCAC TGAATTCAGT CACTTGGAGA TGACAACTTC AAATGCTAAC CCGATGACCC 120
 CAGAAAACCG TGTGAGATTC GTACCGAAGA ACCTTGTGGA ATCCCTTTNC TTAGGCCCAA 180
 40 CCTGGTCGAT AGCTCGAGAA AGANTNTTN CCAAGGAAAT GTCTCGGATA TGGGTACTGT 240
 ATTTGAAAGC TGTTAGCTTT GTCAACACGN 270

50 SEQ ID NO:2663
 SEQUENCE LENGTH:268
 SEQUENCE TYPE:nucleic acid

55

EP 0 679 716 A1

TOPOLOGY:linear
 CLONE:HUMGS03101
 SEQUENCE DESCRIPTION:
 5 GATCATGAAT CAAGCCCTGG AACAGATGAA GACAAAAGCG GATGAGTGAG TTATATAAAC 60
 TTACTTCCAT TCTGTTTCGG ATTTAAAGTT TGAGAGACTT GCTAATNAAT CTCCTTTATG 120
 TTGTTTTCTT TTTCATTGTT TTTGGATTGT TTTATGTTTG TCCTTTTTTT TCTTAATGTG 180
 GATTTTCATTG AGTTGATTTT TTGATAATCT GCAATCTGGA TAATTTGTAC TGCTAAAGTT 240
 TTAATAAACT CGACATGAGA AAAACAAA 268
 10
 SEQ ID NO:2664
 SEQUENCE LENGTH:267
 SEQUENCE TYPE:nucleic acid
 15 TOPOLOGY:linear
 CLONE:HUMGS03102
 SEQUENCE DESCRIPTION:
 GATCAAAATA GTAATAAATC AACAAATAAT TTTTGATTGA CTGGTGGAAT TAGATTTACT 60
 AAATAAAAAT GGCTTAAATT TTGACTGTAC TAACTATAAA TGTAATGAAT TATAATAATT 120
 20 ATAAATGGTA TAAATGCATT CTACAATGTG ATTATTTTCT GTATTTTAGT ATATAGTATA 180
 AAATGGAATT ATTGGGTAA AGTACTTTTA TTACATTCT TAATCCATTG TTTTACCTA 240
 ATAAATTTT CTCCTCTATA TTCCAAA 267
 25
 SEQ ID NO:2665
 SEQUENCE LENGTH:266
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 30 CLONE:HUMGS03103
 SEQUENCE DESCRIPTION:
 GATCCGAATC TGTGCCAGC GCTAAAGGCT CAGTGTTAGC ATGGCTNNN CTGNCCGGTG 60
 TGCCATATTC TTGTTGGAGA TGAACCGTAG CACCAGAGCC CATTCTTCCT TGTCAGTCTT 120
 GGCCCAAAGA TGTCACCATT CCTAGTTATT TGTCACCACA TAATTGGTGT TGATTGGAAG 180
 35 CTTTTTCTGA GATGGGACAG AACTGCTGGG TTGTCTTTT CCATGTAAC TAAGCATAGT 240
 AATATAAATA AAGTAATAGT TGGAAA 266
 40
 SEQ ID NO:2666
 SEQUENCE LENGTH:265
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03104
 SEQUENCE DESCRIPTION:
 45 GATCCTCCCT GTCATGCCAC ATTTCACTGA TTGGAATGTG GAAATGGAAG AGGAATTTAG 60
 GATGTGCATT TTCACCTGAG GTTTCCTGTC ATCCCTGCAG TGCCAAAGCC CCACCTTCAG 120
 GGACCACCTG GAATGTGTGA GGGGCTGACA GCACAGTAAC GTGCATACAT ATCTGCAGGG 180
 CTGGAATGGA AGCTTTAAAG GTGGTAGTGA TTTTNATTTT GGAAGAATCA TGTTACCTTT 240
 50 TTGTTAAATA AAATTTGTAC TCAAA 265
 55

SEQ ID NO:2667

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03105

SEQUENCE DESCRIPTION:

GATCCAGTGT CCATGGAAAC ATTCCCACAT GCCGTGACTC TGGACTATAT CANTATTTGG 60
 AAAGCAGGGT TCCTCTGCCT GCAAACAAGC CCACGTGGAC CAGTCTGAAT GTNTTTCCTT 120
 TNCACCTATG TTTTAAAGTA GTCAAACCTC AAGAAACAAT CTAACAAGT TTCTGTTGCA 180
 TATGTGTTTG TAAACTTGTA TTTGTATTTA GTAGGCTTCT ATATTGCATT TACTTGTGTT 240
 TTGTAACCTC TGATTCTCCC TTTNCGGATA CTATTGATGA ATAAAGGANT TAANGTGGAT 300
 AAA 303

SEQ ID NO:2668

SEQUENCE LENGTH:263

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03106

SEQUENCE DESCRIPTION:

GATCAACCAA GGCAGATGTG ACAGCAAGGG CCACGGACCC CATGGCAGGG GTGGCGTCTT 60
 CATNAGGGAG GGGCCCAAAG CCCTTGTGGG CGGACCTCCC CTGAGCCTGT CTGAGGGGCC 120
 AGCCCTTAGT GCATTCAAGC TAAGGCCCTT GGCAGGGAT GCCACCNCTG CTCCTTCGGA 180
 GGACGTGCCC TCACCCCTCA CTGGTCCACT GGCTTGAGAC TCACCCCGTC TGCCAGTAA 240
 AAGCCTTTCT GCAGCAGCTG AAA 263

SEQ ID NO:2669

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03108

SEQUENCE DESCRIPTION:

GATCTGGCCT AGGTCCCCC TTTNTNCTGT CCCCTGTNTT TAAGTCGGGA TTTTACAGA 60
 GGGAGCTGTC TCCAGACAGC TCATCAGGAA CCAAGCAAAG GCCAGATAGC CTGACAGATA 120
 GGCTAGTGGT ATTGTGTATA TGGCGGGGAC GTGTGTGTCA TTATNATTTG AGTTATGCTG 180
 TTGTTTAGGG GTAAATAACA GTAAATAATT AATAATAATA ATAATAATAN TAATAATAAN 240
 GGNGCNGACG TTCTTAAA 258

SEQ ID NO:2670

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03109

SEQUENCE DESCRIPTION:

GATCCACCCG CTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA TCACACCTGG 60
 TCAACTTTCT TTTGATTAGT GTTTTGTGG TATATCTTTT TCCATCATGT TACTTTAAAT 120

ATATCTATAT TATTGTATTT AAAATGTGTT TCTTACAGAC TGCATGTAGT TGGGTATAAT 180
 TTTNATCCAG TCTAAAAATA TCTGTCTTTT AATTGGNGTT TAGACAATTT ATATTTAATA 240
 AAATGGNNGA ATTTAAA 257

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SEQ ID NO:2671
 SEQUENCE LENGTH:257
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03110

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SEQUENCE DESCRIPTION:
 GATCAGATGT NGCTCAGAAA CTTTCATTGT TTACCTAATA ATTTAATATC ACTAGTTTCC 60
 TAGTGGGTCA AGCAGATGCA AAANCCAGCT TATTCCTCC TATGTNCTCT CAAGCTTATN 120
 GCTTATTINA AAGTAAAANC CTGAAAAAGG AAAATATTAG GTTGGTGCAA ACGTAATTNC 180
 GGTTTTGCCA TTGTNGAAAT TTGCCGTTTT ATATTGGAGT ACATTCTTAA NTAAATGTGG 240
 TTATGTTATA CATCAA 257

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SEQ ID NO:2672
 SEQUENCE LENGTH:256
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03111

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SEQUENCE DESCRIPTION:
 GATCAATTAC TGTCCTCACT TAGAACAAAG CCTGAGTCCG AGAATATTTA TATTTTACCA 60
 ATATATGCCT GTTACAAGAG AAGGAAATAT GAGTTATTTA AGTTTAACTT TTTTATGTGA 120
 ATTCAGAGTT TATTTATCGA GGGAAATATG TACAAAGAAG CTTCAAATGG AATATTTACC 180
 GACATTCCTT ATACATGACA GACACTNGGC TACATGGGAA GATGATGTTA ATAATAANNT 240
 GATTTTAAAN TGGAAA 256

30

SEQ ID NO:2673
 SEQUENCE LENGTH:256
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03112

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SEQUENCE DESCRIPTION:
 GATCTGGAGA GGATTAGGGA CGGCTCTTGT GGGCACATTT TNNCTCTAGT TTCATGGGTG 60
 GAGATGGCAT CTCNGTGGT CTGCAGCATG CAAGTAAAGA CACCAGGTGG CACCATTNAT 120
 NAGCTTTCAA TCCCATGGAG AGGTCCCATC ATGTAAC TNC CAAGAGGTTG AAGGAACCAA 180
 CTACCTCTTG CATATTGTNG CTAATGGTTC TNGCCTTCTC CTTCCAGACT TGGGAAATAA 240
 NTTTAAAAAT NGTAAA 256

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SEQ ID NO:2674
 SEQUENCE LENGTH:433
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03115

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SEQUENCE DESCRIPTION:

5 GATCTACCTT GGTGATTGG ACCCTGGTTG CTTTGTGTCT AGTTTTCTAG ACCCTTCATC 60
 TCTTACTTGA TAGACTTACT AATAAAATGT GAAGACTAGA CCAATTGTCA TGCTTGACAC 120
 AACTGCTGTG GCTGGTTGGT GCTTTGTTTA TGGTAGTAGT TTTNCTGTAA CACAGAATAT 180
 AGGATAAGAA ATAAGANTAA AGTACCTTGA CTTTGTTTAC AGCATGTAGG GTGATGAGCA 240
 CTCACAATTG TNGACTAAAA TGCTGCTTTT AAAACATAGG AAAGTAGAAT GGTGAGTGC 300
 AAATCCATAG CACAAGGTAA ATTGAGCTNG TTANGGCAAT CAGGTAAAAAT AGTCATGNTT 360
 10 CTNTGTNATG TAANCCCGTA AATGANTGTT CCTGGTTTCN CGGTGGTTTT TTNANGGGNC 420
 NCNTTNANNT TTN 433

SEQ ID NO:2675

SEQUENCE LENGTH:250

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03116

SEQUENCE DESCRIPTION:

20 GATCAGAAGA AAGAAAGACA ACTTTCCTCT GCGCGGAACA CTCACACGGA AGGGCTGGCC 60
 GCCTCCCTGA GCCGGCTGGG AGTNGACGAC AGGACCTACC TCCCAGAGC AAGGGCCTGG 120
 GGCTTCCCGC CAAAGCTGCC GCGGAACCCC GCTAGTGC GAACCCCTCCC TCCGTCGGTA 180
 TGTCTGCTT TCCAGCTGAA CCCAACTAC AAGTGGGTTT AAAAAATAA ACACCACCAC 240
 CAAAAACAAA 250

25 SEQ ID NO:2676

SEQUENCE LENGTH:247

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS03117

SEQUENCE DESCRIPTION:

35 GATCTGAAAA AGATGGTCAT TCCGGACTCC TGACGCCGCC AGTCCCGCGG TGAGACGTGA 60
 GCNCCATTGG GTCCAGTGGC CTCNTTTTCC GTGGCAACCT AGTAACCATT AATTTTNAAT 120
 TAAAGGAGAC AAAAAGCTCG ATGACAGCTC CAGGTCTGCT GAAGATGTCA AGAATCTGTA 180
 TTAATATACA GCAAGAGAGC ATAATTGTNT GTCCATCTTC CAGAGCAGCG AAAAAATGGAG 240
 GGATAAN 247

40 SEQ ID NO:2677

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03118

SEQUENCE DESCRIPTION:

45 GATCAAAACC ATCCTGGCCA AAATGGTGAA CCCTGTCTCT ACTAAAAATA CAAAAATTAG 60
 CTGGGCATAG TGGCACGCGC CTGCAGTCCC AGCTACTCAG GAAGCTGAGG CAGGAGAATC 120
 GCTTGAACCC AGGAGGCAGA GGTGTCTGTG AGCCGAGATT GCACCACTGC ACTCCAGCCT 180
 50 GGGCAACAGA GTGAGACTCC ATCTGAAAAA AAAAAANTNC AGGCNTGCAA GNTTGGCGTA 240
 ATCAN 245

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SEQ ID NO:2678

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03119

SEQUENCE DESCRIPTION:

GATCAGCAGG GCTACCATCT CACTCTTCTG TAATTTTACA ACATTCTAAA GGAAGTAAAT 60
 CACCAGATTT GCTGATGTAT CAGGGTCCAC CAGACACTGC AGAAATAATA AAAACATTAC 120
 CTCAGNAATA CAGNAGGAAA CTTGTGTCTC AAGAAGAAAT GGAATTTATC CAACGTGGAG 180
 GTCCTGAATA ACCATGGTGG CTGCTGTTTG TCATCAGACA NTAGAATTGT CTTTACAATA 240
 AAGGNCTTCC AAAATGGCAG ATGNAGAACT GTATATTAAA CACCTTTAGT AANTANTATG 300
 GANNAAGTGN NATNTAGGNN ATTAGGTGG TCCCTNGGAT TNCCGNN 347

SEQ ID NO:2679

SEQUENCE LENGTH:242

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03120

SEQUENCE DESCRIPTION:

GATCTGGCCT GGAGAGGCCA TCCTATACCC CTTATTAGAG CCATGACAGC CTACAGAGTG 60
 AGGTGAGGTG CTCCACCTT CCCAGATGGT TCCTTTCTGC CCCTTCCTGG AAGGAAAGGT 120
 GAGGCTGCCA ATAGCCTCCT GGCACCAGCC AGACCTCACC CTTGACCAAC CTCTCGGGGC 180
 TGGGGGTTCA TTCCTGGGGC ACTGTGGCCT GGTTTTGCTT TGAAACCAAG AAAGAGCAAA 240
 GN 242

SEQ ID NO:2680

SEQUENCE LENGTH:411

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03121

SEQUENCE DESCRIPTION:

GATCCCAAC AATGTGAAAA CGGCTGTCTG TNACATCCCA CCTCGGGGGC TAAAAATNTC 60
 CGNCACCTTC ATTGGCAACA GCACGGCCAT CCAGGAGCTG TTCAAGCGCA TCTCCGAGCA 120
 GTTCACGGCC ATGTTCCGGC GNAAGGCCTT CCTGCACTGG TACACGGGCG AGGGNATGGA 180
 CGAGATGGAG TTCACCGAGG CCGAGAGCAN CATGAATGAC CTGGTGTCCG AGTACCAGCA 240
 GTACCAGGAT GCCACAGCCG AGNAGGAGGG CGAGTTCGAG GAGGAGGCTT AGGAGGAGGT 300
 TGGCCTAGAG CCTTCAANTC ACTGGGGAAA AGCAGGGGAA GCAGTGTNGA ACTCTTTTAT 360
 TCACTTCCNA GNCTGGTCN NGTNGGNCTN GTTCCCACTG TGTGCAATTG N 411

SEQ ID NO:2681

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03122

SEQUENCE DESCRIPTION:

GATCTGCCGA CGGTGCACAG CCCACCAGAG CACTACAGCC TTTTATTGAG TGGGGTGGGG 60
 CAAGTGCTGG GCTGTGGTCG TGCCCTGACA GCATCTTCCC CAGGCAGCGG CTCTGTGGAG 120
 GAGGCCATAC TCCCTAGTT GGCCACTGGG GCCACCACCC TGACCACCAC TGTGCCCTC 180
 ATTGTTACTA CCTTGTGAGA TAAAACTGA TTAAACCTTT GTGGCTGTGG TTGGCTGAAA 240

SEQ ID NO:2682

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03123

SEQUENCE DESCRIPTION:

GATCACCTGG GGACAGAGGT GAAAGGCCTG CTGGGCCTGC TGGAGGAGCT GGCCTGGAAC 60
 CTGCCCCCGG GACCCTTCAG CCCCCTCCC GACCTTNTCG GAGATGGCTT CTNAGCCCTG 120
 GAGCTGGAGC CCAGCAGTTG GAGGTGGTGC ACCTGCCAGG CAGCGCCAC AGAACCAGCC 180
 CTGTCCTCTC GACTTCCTTC CTTAGCTTCA TGTGAAATAA AAGCTATTCT GGTCAAA 237

SEQ ID NO:2683

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03124

SEQUENCE DESCRIPTION:

GATCGGCATG GTCATTACC AAGTGGAAGC CAAACCCTCT GTGTATTCA TCAAGTTTGA 60
 TGATGATTTC CATATCTATG TCTACGATTT GGTGAAAAAG TCCTAACTGT TAGGGTAAAA 120
 TTTGGCACAT GTGTGGAAC AAATGTATAA TTTGTAGACA TGCAAAAAAT GTTGCCCTTC 180
 AGTGATTGA AAGCTTATGG AATCCCTGAT AACTAAACAT CTTGCCAGC ATTAAA 236

SEQ ID NO:2684

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03125

SEQUENCE DESCRIPTION:

GATCACACAT ATCCTTCCTG AGANGAGCAG TGAATAAAT GGAATATCTT TTAAAGANCA 60
 GCTCCTCTTT AACAAAAAN CTAAAAAGAC AAATGTGAGA TGGGCTTAGA GTTAGTNCTC 120
 TGGGAACCTG AAAGACATTT ATGCCATATT ATTTATNCAC GTGTTGTNC CTGGTGGGCA 180
 AGATGCCATC TGAGGCTTCA GATGAGAAAT TGGGGTAANN TGAAATTTT NCACTN 236

SEQ ID NO:2685

SEQUENCE LENGTH:234

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03126

SEQUENCE DESCRIPTION:

5 GATCAATCCC TCAAGATTTT GAAATCCTGA AGAAATTGAG AAGTATGTTG CTGAAATTGA 60
 AAANGAAAA GAAGAAAACG AAAAGAAGAA AAAAAAGAAA GCATCATGAT GAATAAAATG 120
 TCTTTGCTTG TAATTTTAA ATTCATATCA ATCATGGATG AGTCTCGATG TGTAGGCCTT 180
 TCCATTCCAT TTATTCACAC TGAGTGTCTT ACAATAAACT TCCGTATTTT TAAA 234

10 SEQ ID NO:2686
 SEQUENCE LENGTH:230
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03127
 SEQUENCE DESCRIPTION:
 15 GATCTAGGCC TGGCAAGANC TCTGGCCCCA AGGCCTCCTC TTCCCAGGGG CTGCCAAGTC 60
 CTGGCCCTGG CCCTGGCATA TNACCCCGNA CTGTGGGGCC AGTCACCACT AGCCTGGCTC 120
 AAATATTCCC CAGGGAGACT NCTGTGTGCT GCCCGGCTNC CTGCTGGCTC TCCCCAGNC 180
 CCACATCCCN TCTNGAAGAG AATGTAAAAT AAACCTGGAC ACAAGGGAAA 230

20 SEQ ID NO:2687
 SEQUENCE LENGTH:232
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03128
 25 SEQUENCE DESCRIPTION:
 GATCCATGAG GTCCTAGCCC CTGGCTGCCT GGATGCNTTC CCCCTGCTCT CAGCATATNT 60
 GGGGCGCCTC ANTGCCCGGC CCAAGCTCAA GGCCTTCCTG GCCTCCCTG AGTACGTNAA 120
 CCTCCCCATC AATGGCAACG GGAAACAGTG AGGGTTGGGG GGACTCTNAG CGGGAGGCAG 180
 30 AGTTTGCTTT CCTTCTCCA GGACCANTAA AATTNTAAG NGAGNTACTA AA 232

35 SEQ ID NO:2688
 SEQUENCE LENGTH:229
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03129
 SEQUENCE DESCRIPTION:
 40 GATCACAAAA TGTNATAAAA CTTTAAATGT ATAAACTTT ATCAAATAAA GTTTTATTTT 60
 CCCCTTTAAA ATGTATTNT TTAGAGGCAT TACTTTTTTA AAAATATTGG TCAATTNCNG 120
 ACATAAGATG TGAGGTTTAC AGTTGTATTC CAGTATTCAA GATAGATTCC TGATTTTCCA 180
 ATTAGGAAAA GTAAATCCA AAATGTTAGC AAAACAAAGT GCAATATTN 229

45 SEQ ID NO:2689
 SEQUENCE LENGTH:223
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03131
 50 SEQUENCE DESCRIPTION:
 GATCCCATGC CCAGGTGTCC AGCAGACCTC AAGGCAGAAG GGTCACCTAA CCCAGGAGTC 60

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EP 0 679 716 A1

CACAGACTGA TGTGACCTCA GGTTCACACA TCANTGGCCA CAGGGCAGGG CCCACCTGGT 120
AGAAAGTTTTC TGGATATGGC CAGGGTGGGT GTNTGGCTAA NTGGGCCTGA ACAGAGGGAA 180
CCTAGGGGCC TTGGCCAATG TGATTAAAGC TGCCATCTTG AAA 223

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SEQ ID NO:2690

SEQUENCE LENGTH:222

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS03132

SEQUENCE DESCRIPTION:

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GATCCGCCCT GGAGAAGTGA GTGGCTGAGA CCCGGGTGGG GCCCTCCTAA CCTTGGNTCT 60
GGGGGCTTCC NTTCTGGGC TTGTCCGGGA TATGGCCTTC CTGAAGGTCT TACCTCCCCC 120
AGCCGCCCTG CACTTGACCA CCAAAGCAAT CTCTAAGCTT ATAAAGGAGA AACATGTATA 180
TATGGGGTTT TTTGGAGTAA AGGAAAATTC TAAGATATTA AA 222

SEQ ID NO:2691

SEQUENCE LENGTH:222

20

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03133

SEQUENCE DESCRIPTION:

25

GATCCACCTG CCTTGGCCTT CCAAGGTGTT GGAATTACAG GCGTGAGCAA CCGCGCCTGG 60
TCTATATGTN ATTTCAAATN AGGTGGCCTT ATAAATATAA GCAGATGGGT TTCTGGGCAA 120
AATCAAATNA TTTCTGTCTC TATTTNNTTG AGTACCAATT GTAAANCTG AAATTAGGTT 180
GAGGAAAGTN CTTTAGAAAT AATAAGATG TACAANTACA AA 222

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SEQ ID NO:2692

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35

CLONE:HUMGS03134

SEQUENCE DESCRIPTION:

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GATCTGCCCA CCTCAGCCTC TTGAGTAGCT GGGACTACAG GTGCATACCA CCACACCTGG 60
CTAATTTTTT AATTTTNATT TTTATTAAAG ACAAGGTCTC ACTATGCTGC CCAGGTTGGC 120
CTCCCAAAGT GTTGGGATTA CAAGTGTGAG TCACCGTGCC TGGTCCCATG TACTTGANGT 180
CATCACTANC AAAATGTATA GATATTGTAT AATGGCAACN 220

SEQ ID NO:2693

SEQUENCE LENGTH:219

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03135

SEQUENCE DESCRIPTION:

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GATCTTTAAT AAAAATTGA TATGAAAAGC ACAATGTGCA GANGTTATGG AAAACCTATA 60
GAGGATTACA ACAGGTAAAC GTTAAAGAGA ATACATTGCT GACTTATAGT GATGTGGCTA 120

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EP 0 679 716 A1

AGANGTACAT GCTTTGTTGT AAAATTNCTT GAAAGCCCAT TGAAAGATGT ATCTGTTTAT 180
TTACAGTCTT TGAAGTAAAA GTTACCAATG TTTGCCAAA 219

5 SEQ ID NO:2694
SEQUENCE LENGTH:219
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03136
10 SEQUENCE DESCRIPTION:
GATCTNGCCC CTGCGTCTN GCCTGGGTGA CAGAGCAAGA NTCTATCTNA AAAATGTTTT 60
TAAAAAATAC TTCCTAGGGA AACACACATT TNGCCCTATT TGGAACTTTG AAAAGTGAGC 120
CCTCCTCTGC CCATGGGCCG TGCTGCTCAG CCTGCCATAC TCGCTTGCTT TGCTGTTTGG 180
15 NATTTGCCTC CAGAATAAAG GTCCTTTTTG TTGTTGAAA 219

SEQ ID NO:2695
SEQUENCE LENGTH:224
SEQUENCE TYPE:nucleic acid
20 TOPOLOGY:linear
CLONE:HUMGS03138
SEQUENCE DESCRIPTION:
GATCCTAATC CCTTCCTCTC CCATTCACCC TGTGTAACAG NACCCCAAGG ACCTGCCTCC 60
25 CCGGAAGTGC CTTAACCTAG AGGGTCGGGG AGGAGGTTGT GTCACGTACT CAGGCTGCTC 120
CTTCTCTAGT TTCCCTCTC ATCTGACCTT AGTTTGCTGC CATNAGTCTA GTGGTTTCGT 180
GGTTTCGTCT ATTTATTAAA AAATATTTGA GANCAAAAAA CAAA 224

30 SEQ ID NO:2696
SEQUENCE LENGTH:216
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03139
35 SEQUENCE DESCRIPTION:
GATCAAAGTC TTAAGTGTGT TTGCAGCTCA AAAATAAAGA TGTATTAAGG AGGGGAAAAC 60
CTGGTCTAAG TGCAAGGCAC ACTTACAGCG AGTTTACTT TCGGTTGTAT TTTCTTTGTA 120
TATNATAAAC ATTTATTTAA CTGTTGCCG TTTGAAGTAA AAAATTTCCA AAATGTATGC 180
40 TCAACAATAA TCATTAAAT GTTTTCAGCG TACAAA 216

SEQ ID NO:2697
SEQUENCE LENGTH:216
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS03140
SEQUENCE DESCRIPTION:
GATCAAATTG TGTTTAGTAT CACTATCTTC TCTCCTCGTT TCTCTTTAC TCCTCATCCT 60
CCCAGAATCT ACCAGTTTAT GGTAGAAAAG TGGGAACCTT ATTTGAATGT GTTTTTTTTT 120
50 TCCATGATGT CCAATTTTGT NGTGGGAAAG GATTTGGATA AAANTTTNGT TAAATTTNG 180

55

GTAGNTTTTN ATCTNTACAA NTTAANTAA AATNAN

216

SEQ ID NO:2698

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03141

SEQUENCE DESCRIPTION:

GATCTCAAAA GTATTCCTCA GGGTAGTCTC CATTCTGTC ATTTNCCTC CTATTCATGA 60
 GACGGAAAAA TTATGACCAT GGTACAGAGT TGTATCAAGG AAATGAAGAA CTAGAACATT 120
 GAATTGAAAG GTTTTGAAAG GGITCACAAT TTCTTTTCAT TTNCTATTAA TGTCTTCTTT 180
 TAAATNCTCT TAAGAATAAA ACTTTTTTCT AATAAA 216

SEQ ID NO:2699

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03142

SEQUENCE DESCRIPTION:

GATCAGCAAA CAGGAATACG ATGAAGCCGG GCCTTCATT GTCCACCGCA AATNCTTCTA 60
 AAACACTTTC CTGCTCCTCT CTGTCTCTAG CACACAACG TGAATGTCCT GTGGAATTAT 120
 GCCTTCAGTT CTTTCCAAA TCATTCCTAG CCAAAGCTCT GACTCGTTAC CTATGTGTTT 180
 TTTAATAAAT CTGAAATAGG CTA CTGGTAA A 211

SEQ ID NO:2700

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03145

SEQUENCE DESCRIPTION:

GATCACGAAC ANTAGCTTGC GCTCTACTCT GTAGTTATGT GGATTGCCGA GCAATNACCC 60
 TTTTCAATNT CTTATTCTG TGTACTCTAG GACCCTAATC ACTTAGGGAT GTAATTTTAT 120
 AGTATAAACT TTCTGNACAG TTTTCTNAT AGTCTAATAA GTAAAAAGT TCCNNCAAAT 180
 TATGATAATT GCCTATGGTA CATGGATAAN TTAANGCACT GCACACGGTG TAAANN 236

SEQ ID NO:2701

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03146

SEQUENCE DESCRIPTION:

GATCCATTTC TNACACACAC TGCCAGAGAT ACTCTAGGCA TGTAAGCAC AAACATACAT 60
 ATAAAANCTG CGGGCTTCAA AAAATATAAG TAGGATGTCA TCTATACTGT CATACACTTT 120
 GTTTTTTATC ACTTACTTAA TGTATATCT NGGATATTGT ATTACCTTGG GTATTAAAAA 180
 GAACCTCTTT CACATTTTAA AATAAA 206

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SEQ ID NO:2702
 SEQUENCE LENGTH:206
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03147
 SEQUENCE DESCRIPTION:
 GATCTAAAC TGGGGTTTGG GGGAGGGTTT CANCCTCTCC CCACTCCNCT TGCCCCACAC 60
 CCTTTACTCC CCAGCCCAGA GAGACGCTGC TTTTACCAGG AAAGACTATT GAAAGATGTT 120
 TTATATTATT TTNCTCTGAC CTTTCCATCC TTGAAAAAT GGGGAAAAAA GAAGAAAAAA 180
 GACAAAATCG ACCATAAAG ACCAAA 206

SEQ ID NO:2703
 SEQUENCE LENGTH:205
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03148
 SEQUENCE DESCRIPTION:
 GATCTTGTTA ATGCATTTT GATGGGAAGA AAAGGTACAT GTTTACAAAG AGGTTTTATG 60
 AAAAGAATAA AAATTGACTT CTTGCTTGTA CATATAGGNG CAATACTATT ATATTATGTA 120
 GTCCGTTAAC ACTACTTAAA AGTTTAGGGT TTTCTCTTGG TTGTAGAGTG GCCCAGAATT 180
 GCATTCTGAA TGAATAAAGG TTAAA 205

SEQ ID NO:2704
 SEQUENCE LENGTH:203
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03149
 SEQUENCE DESCRIPTION:
 GATCCTGAGG CTTTGATGCT ATTTTNTTAA TCCAGCTGGT CTGTGGAGAA GCCTGGGACA 60
 GAAAGAAGCA GCCAGACTCC AGAATCCCCC ATTTAATAG CTATNNNATG CTATGTCCCC 120
 GTCTTATCC TGGCAACTTA CCTCTCAGCT CGTGCACTGT GACATTACAG CAAGAAGTAC 180
 TAATATAAAT GACACAAANG AAA 203

SEQ ID NO:2705
 SEQUENCE LENGTH:203
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03150
 SEQUENCE DESCRIPTION:
 GATCTGAAAA AAATACGGTT GAAAGTGGTG CAGGTAATTA CAATGTGTAG GCAAACCAGA 60
 AAACCATGGC TTAAACCAGC AGCTTTTGTN AGAAATNATT TCTCCAATGA NTGTAGAAAC 120
 GTTTGCNGCT GAATTGTGAC CTNCCATTT NACCTGCTTT TCCTGCAAAG TATATTTNNC 180
 AGACCCAGGC AGTGCTGCTC GCN 203

SEQ ID NO:2706

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03151

SEQUENCE DESCRIPTION:

GATCCAATGC TAAACTCCAA TGGTTCAGTG ACTGTGGTTG CTCTTCTTCA AGGCAGCTGA 60
TACCTGTGCA TACTGCAGGC ATCTAAATTA GAAGACCTGC GAGTAAACT GAAGAAAGAA 120
GGATATTCTA ATATTNTNA TATNGTTGTT AATCATCAAG GNATCTNTTC TCGATTAAAA 180
TNCACACATC TTANGAAA 198

SEQ ID NO:2707

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03152

SEQUENCE DESCRIPTION:

GATCCATAAT TCCTATTCAA TGAACATCAT TGGTGGTGGC TGAATACATT TTGGAAGAGA 60
GTTTTTCATC TTAGAGATTG GTGAACAAGT GTGAGGGTGT GAGAACTCA CAGAATACAA 120
ATTTGCCTGT ATGTTTTGTG GGTTTTTTTT TTCCCCTTCA NGATGTTTNC TATTNCTAAN 180
TTAANGTAAT TNCAAGGTAA A 201

SEQ ID NO:2708

SEQUENCE LENGTH:196

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03153

SEQUENCE DESCRIPTION:

GATCTATTAG TTTAGTGTTC ATNAAAGAAT CAAATGTATA GAATTACCAA GCATTCGTGG 60
GGAATNCTGT GTAGCAAATG TAAAACTNAC CTGCTCGGAA GAAACGTAGG ANCGCTTCAA 120
ACCCACTGTA ATGTTTGGTT TGANNTTATT TCCATTGCTT TNAGAGTGAN CTGCCTAAGN 180
GTAGGCCTTA TAATAN 196

SEQ ID NO:2709

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03154

SEQUENCE DESCRIPTION:

GATCTACAAG NATTTTCTTT TAGTAGTTAT ACAAAGANT ATTACATTTA TTGGTCTGTA 60
CAGTGAATA AACCAGCAAT AGGGACAACA ACAAAGAGAA TCTAAGAAAG ANGACTATGC 120
CTAANTATAG GGAAAGTTTA GAGAATCATT TTTAGACAGG ACACATTTTG CAGTAGTGAA 180
TGTGGTAGGT TTN 193

SEQ ID NO:2710

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03155

SEQUENCE DESCRIPTION:

GATCAGTGTT GCAACATANT GNAAAAGATG GCTACTGTGC CTTGTGTAC TTAATCATAC 60
 AGTAAGNTGA CCTGGAAATG AATGAACTA TTACTCCTAA GANTTACATT GTATAGCCCC 120
 ACAGATTAAN TTTAATTAAT TANTTCAAAA CATGTTANCC GCNACTTTCA TGTACTATGG 180
 AAAAGTACAN GTN 193

SEQ ID NO:2711

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03156

SEQUENCE DESCRIPTION:

GATCTCGAAC CCTGTCTAGA AGGAATGTAT TTGTTGCTAA ATTCGTAGC ACTGTTTACA 60
 GTTTTCCTCC ATGTTATTTA TGAATTTNAT ATTCCGTGAA TGTATATNGT CTTGTAATGT 120
 TGCATAATGT TCACTTTTAA TAGTGTGTCC TTTATNCTAA ACAGTAANGT GGTTTTATTN 180
 CTATCACACA AA 192

SEQ ID NO:2712

SEQUENCE LENGTH:386

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03157

SEQUENCE DESCRIPTION:

GATCCAGAAT NGAGACTGGA CCTTCCAGAC CCTGGTAATG CTGGAAACAG TTCCTCGGAG 60
 TGGAGAGGTT TACACCTGCC AAGTGGAGCA TCCAAGCATG ATGAGCCCTC TNACGGTGCA 120
 ATGGAGTGCA CGGTCTGAAT CTGCACAGAG CAAGATGCTG AGTGGAGTCG GGGGCTTTGT 180
 GCTGGGCCTG CTCTTNCCTG GNACAGGGCT GTTCATCTAC TTCAGGANTC AGAAAGGNCA 240
 CTCTGGNCTT CAGCCANCAG GACTCTTTGN GCTGAAGTGC AGGTGNCCAC GATTCAAGGG 300
 ANGAACCTTC TTGNCCCANG NTTTTCAAGA TGGAAAAGCT TTCCCCAACT TTGGNTTCTT 360
 NTTTNTTCCC ACCAAAGAAN CTTNAN 386

SEQ ID NO:2713

SEQUENCE LENGTH:189

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03159

SEQUENCE DESCRIPTION:

GATCTTCCGG AAAAATAAG CCCCTCCTTC ACCCCCGCAC ACCTGCATCC CTGCCGGAGT 60
 CNTGNTGAGG CACGAACCCT GCCTCCCTAG GCCGGACCTT GTGGACGACA GCCCCACCCA 120
 GTCTGTGCTC TCAGCCGCTG GCCGAAGGCC CAGCCTGCTC AGAATAAAGC ATGTCCTGCT 180
 GCCGGCAAA 189

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SEQ ID NO:2714
SEQUENCE LENGTH:189
SEQUENCE TYPE:nucleic acid
5 TOPOLOGY:linear
CLONE:HUMGS03160
SEQUENCE DESCRIPTION:
GATCCCATAG TTTTACATTT TNCCTGTTTA TTTTGATTTT TTNCACTGCT TTATTCTTA 60
AAGTNCTAGC ACATCTGTNA CTCCTCCACT TCCACATTTT TNCCTGCTT ACACTTACGT 120
10 GCAATCTTAT TCCTNGTCTG CACACACATG TGGAAAGCTA GAAATAAATG TAAAACTNA 180
CTTTTTAAA 189

SEQ ID NO:2715
15 SEQUENCE LENGTH:187
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03162
SEQUENCE DESCRIPTION:
20 GATCAAATCT CTCCTGGCTG TAGTAACCCA GTGGAATGAA TTTGGNCATG CCCCAATGCT 60
TCTATATGCT AAGTGAAATC TGTGTCTGTA ATTTGTTGGG GGGTGGATAG GGTGGGGTCT 120
CCATCTACTT TTTGTCACCA TCATCTGAAA TGGGGAAATA TGTAATAAA TATATCAGCA 180
AAGCAAA 187

25 SEQ ID NO:2716
SEQUENCE LENGTH:187
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
30 CLONE:HUMGS03163
SEQUENCE DESCRIPTION:
GATCCAAGGG CACAAGGAGA TGAGCAAGGT GTGGAACGAC CTGAGGCCCA AGCTCAGCTG 60
CCTCTTTGCG GGACCACACA GCACCTGAC CCCACCGTGC TCCNNGNCGG AGGACGGCCT 120
35 GTGTCTCAN TAGCGCCTGA GGCTGNGGTG GTGCTCCCTG CGGNCGCACT AAAACCTCTT 180
TNCNAAA 187

40 SEQ ID NO:2717
SEQUENCE LENGTH:188
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03164
SEQUENCE DESCRIPTION:
45 GATCCTCCTG TTTACCCTGT ACCTCCAATG TCTGGCACTT GTAGGTGCTC AAATATTCGT 60
TGAATGAATG AAAAATCCAT ATTGTAATTG ATGTCCTCTG GCCACATAGT TTTAAAATTA 120
GGTGATTGAT TATATGACCG AATAGAACTA TCAAATGTTT TCCTAATAAA GTCAATATTT 180
CAAACAAA 188

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SEQ ID NO:2718

SEQUENCE LENGTH:183

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03166

SEQUENCE DESCRIPTION:

GATCTGCCCC CCTCAGCCTC CCAAAGTGCT GGGNTTACAG GCATGAGCCN TCGCGCCCGG 60
 CCGGATTTTT TTTTTTTTG ATTCAGCTTA TACCAGGGCT GAAAACCTCA NTTTATGTTT 120
 ATGACAGTNG GGATTTTTTT AAATGCCTAC ATTCTTTCTA ATAACTGTT GGAAGACNTT 180
 AAA 183

SEQ ID NO:2719

SEQUENCE LENGTH:182

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03167

SEQUENCE DESCRIPTION:

GATCCAAGTG GCCCAGCAGA AACGGAATTN TNGTNAAAAT GACTGATTCT GGTGCATGTN 60
 AAAGGCTCTG GGGAAATNAAT ACCTGTTTGG TCCAACTTA CTGTATCATA ATGCTGTATA 120
 TGTNGAAAAC GTAATACCTG TNAATGTCCT AATGAATCAN GTTTGCAGA AAACACCGTA 180
 AA 182

SEQ ID NO:2720

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03168

SEQUENCE DESCRIPTION:

GATCCTCCAT TGGAGTGGCC CAATCTTTCC TCTAGGGCAA TCCTGAAAGC CCAAGGCCCT 60
 TCNCAGTCTG GCCTTGCTT CAGCTGGAGA AGGGTAACAT CAGTCATTGT CAAGGCACCN 120
 CCANCCNGA CAGACCGTGT CTCTGATAAA GGTTTTGAAG TGATAAAGTT TAAAACTAA 180
 A 181

SEQ ID NO:2721

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03169

SEQUENCE DESCRIPTION:

GATCCTCACT CCACTGTCAT GTTTGAAAGA GGTATTGGTG TTCTGGAGTG GGGGTCAACC 60
 CCTCCCCAGT CTCTGTGCTA AGTTCATTG GGAGGATGGC AGTAGGAGCC AGGGCTGGCC 120
 ATGGGTCCCC TACGCTTNCC NNTAGGATAT ACCCTGGAGA ATGGCAAAAT GATTAAA 178

SEQ ID NO:2722

SEQUENCE LENGTH:287

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03170

SEQUENCE DESCRIPTION:

GATCCTAAGG CAAAGAGGTG TTTTTCCTTC TGGTTGATTC ATCCCAAAGC TTTCCACCC 60
 AGGTTTTCTC TGAAAGCTTA GCCTTAAGAG AACACGCAGA GAGTTTCCT AGATATACTC 120
 CTGCCTCCAG GTGCTGGGAC ACACCTTTC AAAATGCTGT GGGAAAGCAGG AGCTGGGGAG 180
 CTGTNTTAAG TCAAAGTAGA AACCCTCCAG TNTNTGGTGT TGTGTAGAGA NTAGGNCATA 240
 GGGTAAAGNG GCCAAGCTGC CTGTAGTTAG TAGAGAAGAN TGGGGAN 287

SEQ ID NO:2723

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03171

SEQUENCE DESCRIPTION:

GATCACCATG ACTGCAACAT GGTTTATATT CATGCTGCCC TAGAACTTT TGTAATTATT 60
 TGTGCAAAAT TTGTGACTGT CCTTATTAAC TTTCTTNAT GTAAGTAATT TGTAAGATT 120
 TCTNAAAATT TTTGCTTTTG CTTATTTAAT TTTNAATAAA AGCTAAATTC CTAATAAA 178

SEQ ID NO:2724

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03172

SEQUENCE DESCRIPTION:

GATCCTGGAG CCCCCGTGTC GGGGGGCGAG GNGGGGCGG TGNCCGACGA GTTGANCTTC 60
 TNAACATGAG TGCAACTTC AGGACTTGCT TCCAAGCCCT TCCCTCTGTT GGAAATTGGG 120
 TGTGCCATNN CTCCAAGGN AGGCCCATGT GACTAATAAA AACTGTGAA CCCTGAAA 178

SEQ ID NO:2725

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03173

SEQUENCE DESCRIPTION:

GATCCTTTTG AATTTTGCAC AGCCCTAGAT ACAATCCCTT TTGATAAAG GGTCTTTGCT 60
 TCTNATTACA GGAGCACTGT GGAACGCTG TAAATATGTT TTTATAATTC CATGTATAGT 120
 TGGTGTACAC TCAAAACCTG TCCCCGGCAG CCAGTGCTCT CTGTATAGGG CCATAATGGA 180
 ATTCTGAAGA AATCTTGGGG AGGGAAGGGG AGTTNGAACA AATGTCTGTT CCCTGGGAGG 240
 CCAGTCCAGT GCTCAGACCT TTAGACTCAT TGTAAGTTGC CACTGTCAAC ATGGGACCAA 300
 AGGTGTGTGA CTAGTCAATG AAAGTGCGGN CANATTN 337

SEQ ID NO:2726

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03175

SEQUENCE DESCRIPTION:

GATCCAAAAC ACTCAATCCT CGTAAAAGGG TACAGGTCCT ATTGTATGTT AACACACGTG 60
ATGATGTGAG CCATGTGAGA TGANCAATCA CCAGTTGTTA TGTTCCAATC TCCTTTGTGT 120
TGGGCCCGCTT TAATGTCAGG GTTCTACTAA ATAAATGAAT TTTTCATATAC TGAACGAAA 180

SEQ ID NO:2727

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03176

SEQUENCE DESCRIPTION:

GATCTGAGCC AGGATGGGAG TGAATCCCAG GCGGAGGCCA GAGCTGGCAG CCAGCTCTGC 60
CTTTCCACTG CCGGGAGTGC TGGGGGCCCA GCCTGGCCCC CNGAAGAGAC AGCCAAGTGT 120
CGTCCACATA CTCCTCCCAG AGTGAGCTCT AACCAGGCTC ATTTGCTCTN TCCAN 175

SEQ ID NO:2728

SEQUENCE LENGTH:175

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03177

SEQUENCE DESCRIPTION:

GATCCTGTTN CCNACCTCCT TCTCCTCCCC TGTACTCCCC AGTGCCTTCC ATTGTCCTGG 60
TGGAGCTGGG GTTCTCTTCC TCCCCAGTCC CACAACACTG CAAAAATCT GTGTATGTNC 120
CATTGGGTGG GGCAGCCCCA AGCCTCCTGG GGAGGCAGGG CAAAAACAGG TGCCN 175

SEQ ID NO:2729

SEQUENCE LENGTH:174

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03178

SEQUENCE DESCRIPTION:

GATCAGAGGA AAGATGAGAA AGAGAACAAG CATACCTATC TNACTCCTTC CAGTGGTCTC 60
TGTTCCCTCC GTTCCTGGA CCACGGCTAG AGTTCCAGT TTGGCCTTTT GGGGCATTCA 120
TCCCATCTAC TTTATTTTCA TCTGCTGGG CAGTAATGTA AACAAATTAA AGGN 174

SEQ ID NO:2730

SEQUENCE LENGTH:271

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03179

SEQUENCE DESCRIPTION:

GATCGTCTGG GAGCCCAGTG TCAAGTCTGC TGGAATGCAG GAAGTAGAAC AGAATCGCCA 60

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5 CAGGACTGTT CTGGGGCCAG GTTCCCTTAA CTCTGTAGCC TGGCAGTCTG ACCCAAAGTT 120
 GCCCTCACCC AAAGGTTCTG GCTCTTCCCT CCCTCACTTT TACTTTCCCT TCCCCCATAA 180
 GTTGGAGGAT AAAATGGGTA TCAATGNTAA TTTTCCAGG GNGNCCATGN NNACCAGCGG 240
 TTTCTNNCTN TCTCTGTAAT CTGCTATGNA N 271

10 SEQ ID NO:2731
 SEQUENCE LENGTH:178
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03180
 SEQUENCE DESCRIPTION:
 15 GATCTNCGGN CTGTCGTTAG CAGGCTTAAT NAAGAACACT TCTCAACAGT TTCCTTTTNN 60
 TTTCTTTTA TAATTCATA AAATAAGCA TCTATTAGTG TCTGATTAG GAATGTAAAA 120
 TAATTCTNTA TTAATGTAAA TAAGATTATC TATTGCAAAA NGATATTCA ANCCTAAA 178

20 SEQ ID NO:2732
 SEQUENCE LENGTH:172
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03181
 SEQUENCE DESCRIPTION:
 25 GATCTTACCA AAGAGGTCAA CACATGGGAC CTTTGTGTCA CATGAACCAT TTTTTCCT 60
 CTTCTATTAA GTGTATTNT GTTTAAGNTA CAGTTCTCTA AGAGAATTAC AATGTTTGTC 120
 CCATTCTAA GGGCTTCTNT TCAACTCTAA TAACAGCATT ATTCACGTAA AA 172

30 SEQ ID NO:2733
 SEQUENCE LENGTH:170
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03182
 35 SEQUENCE DESCRIPTION:
 GATCAGGAAA CGGCAACAAG CCTCCCAGTA CTGACCTGAA AACTTGTGAC AAGAAGAACA 60
 CCAACAAGTG CTCCCTGGGC TGAGGACCCT TTNTTGCCTC CCCACCCCGG AAGCTGNACC 120
 TGAGGGAGAC AACGGCAGAG GGAGTNAGCA GGGGAGAAAT AGCAGAGGGN 170

40 SEQ ID NO:2734
 SEQUENCE LENGTH:176
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 45 CLONE:HUMGS03183
 SEQUENCE DESCRIPTION:
 GATCTGGATT TATGTATTTG TNAGATACAT ACGAATTGTT AAAATGGAAT GCAAGTTTTT 60
 CAAAAGCCCA GGTCTAAATG TAATGGTTGG TTTATNGTNC TATAACCCCA GCCCATCATT 120
 TCCTGTGTAA ATCATAAACA ATAAACAGAA TATACTCGGT GGCCATTCTT AATAAA 176

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SEQ ID NO:2735

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03185

SEQUENCE DESCRIPTION:

GATCCGCCCA CCTNGGCCTC CCAAAGTGCT GGGATTGCAG GCGTGAGCAN CCGCACCCGG 60
 CCTCCTGAAT TAACATTTTC TAAAGATGCC TCCGGCGTGC TATCCTGAAA GCTGCCAGAG 120
 GTGTCTTGGC TGCATTGGTG GTAATAAAAT TCATACTCAT AAA 163

SEQ ID NO:2736

SEQUENCE LENGTH:162

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03186

SEQUENCE DESCRIPTION:

GATCTCAACT ATGTNCCACT AAAGGCACAG GAATGGAAAA CTGAGAAAAG ATTTATTGGC 60
 CTCACCAATT CCTTTGGTTT TGGTGGTACT AATGCAACAC TTTGTATTGC TGGNCTGTAG 120
 AACATATANT TNGTAATNAA ATACTGATTT TNAAATGTTA AA 162

SEQ ID NO:2737

SEQUENCE LENGTH:160

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03187

SEQUENCE DESCRIPTION:

GATCCTGCCA CCCTGTAGCG CCAGTNTAAT CCCCCAGGAG AACATCTTTG AACTCTTGCA 60
 GACTGTAGT GTTCTGTCTA AAAACCAGAC AAGGAAATAC CCTTCTTTTA TGAGCAGAAG 120
 GAAACAAAAA AAAAAANGAG GCCCNTTTNC CTGGANGAAA 160

SEQ ID NO:2738

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03188

SEQUENCE DESCRIPTION:

GATCTGCCTT ATTGCATATN CCATGCATCA GATAATGGAT GCATCAGATA ATGGNGTTAG 60
 ACAAAGCTTC ATTGTGAACA ACCTAATGCA TTTNNGAGAA ACANTCTCAT CACATTTTTC 120
 CTAGCCTTNC CTACATTAA NCTTGCTGTT GCCCAAATN 159

SEQ ID NO:2739

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03189

SEQUENCE DESCRIPTION:

GATCAGANGT TTCACTTGTT TCTCAGTTAT TGGATATGTA TCTTTGTGTA CATATCTTTG 60
 CAAAANTGGA TAAGTACAAA NCTTGATGTA AATNGTACCA ATGANTATGT AAACATACAG 120
 TGACANCATT AAACCTAGAA AAGTTTAAA ACTTAAA 157

SEQ ID NO:2740

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03190

SEQUENCE DESCRIPTION:

GATCCACTGG AATTAGCCAA TACACTATAT AACAATACTA TTAAAGTATT TTTTCCTGGA 60
 ATATAATTGG TATATGTCTT CCACTTTCCA TCATGTATGT AAAATTTTCAT AGTAAACTT 120
 CCTGATAGTT TCAATAAAGA AATNATCTGC AAA 153

SEQ ID NO:2741

SEQUENCE LENGTH:151

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03192

SEQUENCE DESCRIPTION:

GATCTTNAAT GCTTTGGAAA TGCCTGTAAC AGTACTGCAA TAATCACAGC TCTGGGAAAA 60
 ACAACGAAAC TTTCCCTTGT GGAGAGGAGG GATTCCCTG CTCTATATAA GCAACATATT 120
 TTNAGACATT AAAATATGGT ATNCNNNNCC N 151

SEQ ID NO:2742

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03193

SEQUENCE DESCRIPTION:

GATCTTNCTN ATCCAAGCAA TAACGGGACG AGGGAGCCAG GGCCAAGGAC ACTCAGGGAC 60
 ACTGTTGGGG CAGCGGCCCC ACATGGTAAT GTTTNTTTA GAGAGAAGAA AAAACAAGT 120
 GCTGTAAACG TAAATNATAT TTNTTGAAA 150

SEQ ID NO:2743

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03194

SEQUENCE DESCRIPTION:

GATCGNTTT TTNCTTGTTA AATAATTAAA ANTCATCTTA AAATTCATAC TTTGACTTTA 60
 ATTTAGACAC AAGGAGATGT AATCCTGTG TAACATCAGA GAAAGCTATA TGGATTATNG 120
 TCAGANGTAA ATGTTTCTAA CATTGACAAA 150

SEQ ID NO:2744

SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03195

SEQUENCE DESCRIPTION:

GATCGAGTTG GCCGAGGATG GATGATTNTG NGCAGCAGAA GCCGTTGCAG CCCACGTTG 60
TGCTCTAGGC AGGGACCTTT GGCCCTTTG GGGAGGGAGA GACAGACGGG CGGTTTGACT 120
TGGACACAAA GAAAGCCTTG GTTCTAAA 149

SEQ ID NO:2745

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03196

SEQUENCE DESCRIPTION:

GATCCCAGGT CTGGGGATGG GGGACACCTT NGGCCACAGG ATACTGGTTG CTTCAGGGGT 60
ACCCATGCCC NCTGCCCTNG CCTGGAATCA GTGTTACTGC ATCTGATTAA ATGTCTCCAG 120
AAATAAAGAA TAATTCTGCC AGAAA 145

SEQ ID NO:2746

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03197

SEQUENCE DESCRIPTION:

GATCACTCNT AGAGTNGCCA TTCTGCANCT TCCTAAAAAT ATTTAAAAA TACATTTATT 60
TTACTAAATA CTGACTACAT TTNTNTGTTA ATATTGAGCT AAATGTAAA AAATGGCCAG 120
ATTAAGAT ATCAATTTGT AAA 143

SEQ ID NO:2747

SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03198

SEQUENCE DESCRIPTION:

GATCCATAGT GTGCATGGGC AGACACATTT TGCCTCTATG TCTCTAAAA TTITAATTAA 60
AAATACTCTT TCCAGTAATC CTAATTTGCA CGAAGATATA ATGTCCACAT TACGTGCCTT 120
GCCTTGAAAT CTAACAAAACA AA 142

SEQ ID NO:2748

SEQUENCE LENGTH:142

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03200

SEQUENCE DESCRIPTION:

5 GATCTCAG GACTGAGAAC TCGTTCACCT CCAAGCATTT CATGAAAAAG CTGCTTCTTA 60
 TTAATCATAC AAATCTCAC CATGATGTGA AGAGTTTCAC AAATCTTTCA AAATAAAAAG 120
 TAATGACTTA GAAACTGCCA AA 142

SEQ ID NO:2749

SEQUENCE LENGTH:141

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03201

SEQUENCE DESCRIPTION:

15 GATCTTTTCA TTCTTACTA GCTTTTAAGA AATNAAATAC TTGCCTGAGA TAGAAATACT 60
 TTATTTTGT AACTTTAAGG TCTAAATNAC TAAACTTCAA AGTAAGATTT TNCAGAATA 120
 AATTGAGACC ATTAATCTAA A 141

SEQ ID NO:2750

20 SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03202

SEQUENCE DESCRIPTION:

25 GATCAGAAAA AGAAAGAAGC CAAAGAGAAA GGTACCTGGG TTCAACTANA ACGCCACCTT 60
 GAGCTGCTGG AACCTATTCC CTATGAATTC ATGGCATAAT AGGTGTATAA AAAAAAANA 120
 AAGGACCTCT GGGNTACAAA 140

30 SEQ ID NO:2751

SEQUENCE LENGTH:135

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03204

SEQUENCE DESCRIPTION:

35 GATCCTATTT TCNTACAACC TTTCAGTGAC ATCGTTCAGG NTTCTTTCTT GGCCATTAA 60
 AAAACAAAT TTTTTTTTNC TCACTTGTA GTCACCGCCA GTNCCTAAGT NAGGCTAACG 120
 GNGACTTTGA CAGGN 135

40 SEQ ID NO:2752

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03205

SEQUENCE DESCRIPTION:

45 GATCAGTAAT AGATNTAGAT ATACTATTTT NATATTGTAA GCAGTTACNT ACTCAGGATT 60
 AGNATTCGAA TTCATTTGAT TTAATATGTA ATAGGTAATA TAAAAANTAA AGATTTTATG 120
 CTTTGAAACT CAAA 134

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5 SEQ ID NO:2753
SEQUENCE LENGTH:133
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03206
SEQUENCE DESCRIPTION:
GATCAGACGT CGCTGAGGGG CTGTNCACCA CCATCCTCGT TCTCCAGGGT CAAGGAAGTG 60
10 TTTTAACATG TCGTGTTC GACTTGACCT TGTGGTATTT TNCTNGGCCT AGTTGTGTGC 120
CATGGATATT AAA 133

15 SEQ ID NO:2754
SEQUENCE LENGTH:141
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03207
SEQUENCE DESCRIPTION:
GATCACTGTA GTTTAGTTCT GTTGACCTGT GCACCTACCC CTTGGAAATG TCTGCTGGTA 60
20 TTTCTAATTC CACAGGTCAT NAGATGCCTG CTTGATAATA TATAACAAT AAAACAAC 120
TTCACTTCTT CCTATTGTAA A 141

25 SEQ ID NO:2755
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03208
SEQUENCE DESCRIPTION:
30 GATCGTTATA TTTNACATAA TATAAACAAA ATNACTAATG CATCTATATN CTTGGTTTCC 60
TTAAACTACA ATNAACCACA GAATGGGTGA AAATGCAGGC ATGCACGCTT GGCCTAATCA 120
TGGATGNNGC TN 132

35 SEQ ID NO:2756
SEQUENCE LENGTH:131
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03212
40 SEQUENCE DESCRIPTION:
GATCCGNCCG CCTCAGCCTC CCTATATGTT TTAAATATA ANTTATTCT TATAAANTA 60
AATTNAANCT AGATTGAGGT AGTAATTACA ACAGTCCAGC ACATTATGGA TAATTAATAT 120
TNATATTAT N 131

45 SEQ ID NO:2757
SEQUENCE LENGTH:136
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
50 CLONE:HUMGS03213

55

SEQUENCE DESCRIPTION:

GATCTGATAT TTAAAGANTT TGGAGACCAT TTCCTGTGCC AGANTCACTG CTCTATTCCA 60
 TACCGTGCCA TGGAGGCTGT TTTAGAAGTG GTTGGATAAC ATGTTAAATA AAATATTAAG 120
 TGTAAAAAA AATAAA 136

SEQ ID NO:2758

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03214

SEQUENCE DESCRIPTION:

GATCCACCCA CCTTGGCCTC CCAAAGTCCT GGGATTACAG GTGGGAACCA CAGCACCTNA 60
 CCCAGAAATAT AAAGACACTT TTNTAATGTG CAATGAAAAA TATGTAAATA AANTATTTTT 120
 ATCTNTAAA 129

SEQ ID NO:2759

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03215

SEQUENCE DESCRIPTION:

GATCCACCGT ACCAGGNAGC AGAAATATTT CTACAAAGGG GGCCTAGTTT GGAATGAGAA 60
 CANNTCTGAC GGCCGGTATG TGAAGGAGAA CTGCAAACTT CTGAAGAGTT ACATGCTCCA 120
 AGACTCCCN 129

SEQ ID NO:2760

SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03216

SEQUENCE DESCRIPTION:

GATCATGTTG GGATTAACCT GCCTTTTTC CAAAAANNA AACTCTCAGG CAAGCATTTT 60
 TTAAAGCTA TTAAGGGNGT ATATACTTGA GTACTTATTG AAATGGACAG TAATAAGCAA 120
 ATGTTCTTAT AATGCTACCT GATTTCTATG AAATGTGTTT GACAAGCCAA AATTCNNGGG 180
 TGAGANATC TGGAAAGTTC ATTTCTGGG ATTCATTCTT CCAGGGATTT TTAAAGTTA 240
 ATTTGGGAAA TTANCAGCAG TTCACCTTAT TGTGAGTCTT TGCNACATTT GACTGAATTT 300
 AGCTGTCAAT TGTNCATTTA AAGCAGCTGT TTTGGGGNCT GTGAGAGTCC ATGTATTATA 360
 TCCAAGCCCA CCAGGGCTTN CCCTAAGGAN TTGCCATNGT AATACCCN 408

SEQ ID NO:2761

SEQUENCE LENGTH:128

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03217

SEQUENCE DESCRIPTION:

GATCTAGGAA AGAAGGCAAC TGAAAAACCT GAAAGAAAAA AAATNAAAGA TAAAAAGTAT 60
 ACGATATTCT ATTTTGATTT AGCAATTACT TGTTTNCNAG TGTNCTGTNA ATTTTGGTN 120
 ACTTTAAN 128

5

SEQ ID NO:2762
 SEQUENCE LENGTH:258
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

10

CLONE:HUMGS03218

SEQUENCE DESCRIPTION:

15

GATCGGCAGG CTGAGGACCA GGTCTGAGG AAGCTGGTGG ATTTGGTCAA CCAGAGAGAT 60
 GCCCTCATCC GCTTCCAGGA GGAGCGCAGG CTCAGCGAGC TGGCCTTGGG GACAGGGGCC 120
 CAGGGCTAGA CGAGGGTGGG CCGTCTGCTT TCGTTCCAC AAAGAAAGCA CCTNACCCCA 180
 GCACAGTGCC ACCCNTGTTC ATCTGGGCTG NCTGGCAGAG AGCCTTGCTG TTTACAATTA 240
 AAATGTTTCT GCCACAAA 258

20

SEQ ID NO:2763
 SEQUENCE LENGTH:128
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03219

25

SEQUENCE DESCRIPTION:

GATCCTTGTT GGTCTAGCTA AATACTGTTA GGGGAGTGTG CCCCATCTCA TCATTTGCAA 60
 GATAGCAGAG TCATAGTTGG GCACCCAGTG ATTGGGTTC AAAATAAAGC TGGTCTGCCT 120
 CTTCTAAA 128

30

SEQ ID NO:2764
 SEQUENCE LENGTH:126
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03220

35

SEQUENCE DESCRIPTION:

GATCTNCCGC TCCCTCCCTG AAGGGCATGG GGCCAGGGNA GTCTGGACAG CCGCCCCCAG 60
 CCTGCTGACC CCCAGCTTTC TACAGACACC ANATTGTAA ATAAAGTTGG GGAATGGACA 120
 GCCAAA 126

40

SEQ ID NO:2765
 SEQUENCE LENGTH:126
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03221

45

SEQUENCE DESCRIPTION:

GATCTTTTGA GGCCTTCATT TTATGTTTTT CCTTAACTGT TATATTATNA TTGTAACATA 60
 GATTATACTA CTAATAATTN NTGGATGTNT CAAAAGGTCA AGAAGTAAAA NATGTTAGAA 120
 AGCAAA 126

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EP 0 679 716 A1

5 SEQ ID NO:2766
SEQUENCE LENGTH:125
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03222
SEQUENCE DESCRIPTION:
GATCTCTGCA CAGTTTCTTG TTTAGTCTTA TGCCTTTTAG TTGAAAAACA AATTGTATTT 60
TTTTCTNCT AAGTTTCATG GCCCTAGAGA AGAAGCCAAT NTNNNTAAAG ATGTTATCCC 120
10 NGAAA 125

15 SEQ ID NO:2767
SEQUENCE LENGTH:124
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03223
SEQUENCE DESCRIPTION:
GATCCTGGTT TCAATGACGG TTGGAAATAG AAATTNCCAG AGAAGAGAGT ATTGGGTAGA 60
20 TATTTTCTCT GAATACAAAG TGATGTGTTT AAATACTGCA ATTAAAGTGA TACTGAAACA 120
CAAA 124

25 SEQ ID NO:2768
SEQUENCE LENGTH:131
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03224
SEQUENCE DESCRIPTION:
30 GATCACTTAG CAACATGCTT GGNAATTGG NATCTNTAAA GGTAGGAGAG TGGTGAACAG 60
ATAATCTATG CATATATNAC TAGTGCCAAG ACATAAAGCG GGGGAAAATA TATTTTANCC 120
CAAACATTAA A 131

35 SEQ ID NO:2769
SEQUENCE LENGTH:123
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03225
40 SEQUENCE DESCRIPTION:
GATCAATTAC CTAAGTGTTC CTTGGTCTAT TTATGTATAA GAATGCTTTT TAAAGCACAT 60
GTCTCATTTT AAATNACGCA CAACTGAAG ATGTTAATAA AATTAAAGAG TAATACAATG 120
AAA 123

45 SEQ ID NO:2770
SEQUENCE LENGTH:388
SEQUENCE TYPE:nucleic acid
50 TOPOLOGY:linear

55

CLONE:HUMGS03227

SEQUENCE DESCRIPTION:

5 GATCCATTG TCTGGCAGGA GGTTTTGTAT GATAAAGCAA CGCTTGC GCC AAGGCACAAT 60
 AGTTGAAGNA TGGAAAGACA GCGCATATCC TGAGGAATC AGTAGAGTCA CAGCATCTGG 120
 CTCCCTGTAT ATCCTTTCTN CTCCTNGGTA CTTAGATTNG ATTAGCTATG GACAAGATTG 180
 GAGGAAATAC TATAAAGTGG AACCTCTTGA TTTGGCGGT ACTCAGAAAC AGAAACAAC 240
 TTTCATTGGT GGAGAAGCTT GTCTATGGGG AGANNNTGTG GATGCAACTA ACCTCACTCC 300
 10 AAGATTATG GCCTCGGGCA AGTGCTGTTG GTGAGAGACT CTGGAGGTTC CAAAGATGTC 360
 AGAGATATGN GATGACGCCT ATNACAGN 388

SEQ ID NO:2771

SEQUENCE LENGTH:219

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03229

SEQUENCE DESCRIPTION:

20 GATCGATGGA CCGTAAATAA GCTGCCATTA ACACATCTGG TTACTGCTGT AACATGACTA 60
 ATAAAACCGA ACGCCTGTTT CCCTTACCCG TGTGGGGGAC ACGCAGATGA GTGAATTGGA 120
 ATGTCCAGCA GAGTTACCCT CCAATTATA GTTCATTTT GTATATTTT TGGTCGGGGG 180
 AAAAATTGAC CTGCAGTAAA AAAACCTTTG ACCATTAAA 219

25 SEQ ID NO:2772

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS03230

SEQUENCE DESCRIPTION:

GATCAGCACA GGAAGAGCCT TCCTAAGCAT GTGGTCCCAG GGAAGGGTGA AAAGTAGGAG 60
 TTATGAACGT AATCCACCTA CTACAATGTT GAATTAAAGT TATAATCTCA TAACCTCAA 120

35 SEQ ID NO:2773

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS03231

SEQUENCE DESCRIPTION:

GATCCGCCCG CCTCGGCCTC CCAAAGTGCT TGGATTACAG GCATGAGCCA CCGCACCCAG 60
 CAAGAGTTAT TTNNTTAACT TGAAATTTT TACTAGCCCT GGTGAACCTC TGTGCTTAA 120

45 SEQ ID NO:2774

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS03233

SEQUENCE DESCRIPTION:

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EP 0 679 716 A1

GATCCAAGGT GATACAGCTG GTAACGTATG GAGATGTTGG TAGTGAAATN CATGTACTTT 60
TAGTNCCTTC TATGGAATCT AGAGGNAGAA TACATGTACA AGAATATCGA CTACCGTCN 119

5

SEQ ID NO:2775
SEQUENCE LENGTH:117
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03234

10

SEQUENCE DESCRIPTION:
GATCCCAGCT GTGTGTCACC AGCAGCTTTC CCAGCTTCTC TGTGAGGGTC ACTGCTGCCC 60
ACTGCAGGGT CCCTGAGGTG AAGTAAACGC CGGCCTGGG CTTGGCCAGN CGGCAAA 117

15

SEQ ID NO:2776
SEQUENCE LENGTH:115
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03235

20

SEQUENCE DESCRIPTION:
GATCATCCCC ATTCATAGG TTTTATTGT GGAATAGTCA ACTTAATATA GATTCACTTT 60
CAATTTGCAT GTATAANGTA ATACTCAATA AAATTTTTTC CATTNATTTT NCAAA 115

25

SEQ ID NO:2777
SEQUENCE LENGTH:217
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03236

30

SEQUENCE DESCRIPTION:
GATCCTGGGG TTGGTCTGCT TTGTGTATGG TACTTGAAAC CACGCTGTAA TTATTGTCCT 60
GTTGCCAAAC AAAAGCCAGT CATGTAATC TAGAAGCAGT GACTGGTGGG GCTTTCTGAC 120
AGTTCCATGC TGATGTATCA GGCCATCTGT GTCATGCTTA TGTATTATGG CAAGAAGAGG 180
AAAAGTGGAT TAATAAATAC GTTTNNNNN NGTTAAA 217

35

SEQ ID NO:2778
SEQUENCE LENGTH:114
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03237

40

SEQUENCE DESCRIPTION:
GATCCTNAGC AACGAACACC TGCACCTAGA AAAAGTGGAC AGCTTCTNCC AACCACACCC 60
TACCCATGGN ACTGTATGCA ATTAACCTCT GGAAACGCCC CGTAAATNCN AGTN 114

45

SEQ ID NO:2779
SEQUENCE LENGTH:113
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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EP 0 679 716 A1

CLONE:HUMGS03239

SEQUENCE DESCRIPTION:

5 GATCCAAAAT TACCTTAAAT GGAGTTAAGT AGGCTTTGCA CTAAATGGAT ATAAAAGAGG 60
CTGTCTGGNC TNCTATGAAA TNATGATTAA AATCCTTTGT GTTGTCTTTT AAA 113

SEQ ID NO:2780

SEQUENCE LENGTH:359

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03240

SEQUENCE DESCRIPTION:

15 GATCCTTAAA GAAGGTGTGG GGTCTTTCCC AACCTGAGGA TTTCTGAAAG GTTCACAGGT 60
TCAATATTTA ATGCTTCAGA AGCATGTGAG GTTCCCAACA CTGTCAGCAA AAACCTTAGG 120
AGAAAACCTTA AAANTATATG ATTACATGCG CAATACACAG CTACAGACAC ACATTCTGTT 180
GACAAGGGAA AACCTTCAAA GCATGTTTNT TTCCCTCACC ACAGCAGAGC ATGCAGTACT 240
AANGCGATAT ATTTNTGATT CCCCATGTAA TTCTTCGGNG GNNGGNCAGT GCAGTNTCT 300
20 TTCGGAAGCT TAAGATGGCC NTGNGGCCTG NCCNNNNGGN CATATGCCCC TGAAGGGCN 359

SEQ ID NO:2781

SEQUENCE LENGTH:191

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03241

SEQUENCE DESCRIPTION:

30 GATCTAGGGC AGGCTGTCTT CCAGTCCATG TGTTCGCGT CGCCGTAGAC AGCGCTCTGG 60
CTACCACCGT GAGGCTACTT GAACTGTCAG GGGCATCTGC CTAAACCAGA ATCTTTTGTC 120
AGAAACCTTA ACCCAACAAA ACAAATCTTG AGTAGCTCAT GCCCGGCTCT TAGGAATTTT 180
GTCTGTTTAA A 191

SEQ ID NO:2782

35 SEQUENCE LENGTH:111

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03242

SEQUENCE DESCRIPTION:

40 GATCACTCAA CAGCACTGTN ATGTATTATT TNNAATGAGG TGCCTTTTTT AACTGACCAA 60
ATGCTGCCTT GTTTGGCCCC TAANTCAATA AAATATGTTA AAATTGTAA A 111

SEQ ID NO:2783

45 SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03243

SEQUENCE DESCRIPTION:

50 GATCTAAGAA ATAGAATTAG GGAGAGTTTA CACTTACTTA CCTATATAAA AGCAGATTTT 60

55

CNTGGAAGAA ACCCTTTTTT TTTTTTTTTT TAAANAGNA NCANCCAGN

109

SEQ ID NO:2784

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03244

SEQUENCE DESCRIPTION:

GATCCAGAAG CTGGTGGACG TCACCACGGC ACAGGTGTAA CNTCCATGTN CCGTGTGAGC 60
 AGAGTCCCTA CCAACGGGCA GGTCTGCATC CGGGGAGAAT GCAGCTGCTT CTGGCGACAA 120
 TCCTGCTAGT AAACACTGGT CTTTCGGTGAG CAACGAACAC TCGCCTGGGN TGGGAACTG 180
 CATGCCCCACT TTNTGGGAGG GGTTAGTGCA GGTGCCGTGG ACAAAGGACA ACATTTCTNT 240
 GGGGCTTTTT AACTTTTATT CCTAAGACTC TAAAGGCGTT GATTTCACC CTCCTTCACT 300
 CTGGCTTCTT CAGGNAACCC ACGTGGTCTC CTGTNAGNTN 340

SEQ ID NO:2785

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03245

SEQUENCE DESCRIPTION:

GATCTTTAAG ACAACAAGTT AGGTTCTTAC TGGAGTTACC TGCCAGANTG GCCTCTTAAT 60
 TAACTCAGGT AATGAAGAGC TAACTGTGTT ATAATCATCT NCCNNNTN 108

SEQ ID NO:2786

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03247

SEQUENCE DESCRIPTION:

GATCTGCTAA AAATGGCAAT TGTAAGATNA TGTTGTATGT AATGTACATA TGGAGAAAAGA 60
 ATGTATTTTN TCCATTTCTT TAATAAAATG TTATATATGG NTGCTAAA 108

SEQ ID NO:2787

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03248

SEQUENCE DESCRIPTION:

GATCTCTGAG GCTNCGGTCA CCACCCACAA GTTGTGGCCT TGGATACCAC ACTNCAGTTG 60
 GGTGGTGATG GGGTNGTGCC TTCTAACTTT TNCCNTATCT TTACCGN 107

SEQ ID NO:2788

SEQUENCE LENGTH:125

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear
 CLONE:HUMGS03249
 SEQUENCE DESCRIPTION:
 5 GATCAGTAAG GATGACTGGT GTTTCTGAC TTNACAAAA TTACTTGTTT GTTTTCATTA 60
 AAAAAAAGC ATAANCTATG TTTCTNATTA CTATTAGAAT TATTAAATTT CAAAATGAAT 120
 CAAA 125

10 SEQ ID NO:2789
 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03251
 15 SEQUENCE DESCRIPTION:
 GATCGATTCT NTGACACAAA CCCCACCAAT TGTNAATGCA AGTTTTTATT TGGCTGTATA 60
 TACAATTAA GCTATTAATA TTTGTACAAT ATTTACAAAT NAAA 104

20 SEQ ID NO:2790
 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03252
 25 SEQUENCE DESCRIPTION:
 GATCATTACA TCTNAGATGT ACGTNGGTTT AGTCGGAAG GTGGGACGAT TTGAAGGGGA 60
 GGNACTTTCA GGTCATAGGC GGATTAATAAN ATGTCCTGAT TAAA 104

30 SEQ ID NO:2791
 SEQUENCE LENGTH:104
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03253
 35 SEQUENCE DESCRIPTION:
 GATCCAAGCT ATGANATANC CAACAGTATT CAAGANGCAA CCAGCACCAT CATGTGATAA 60
 TGGTACTATG GCATATATGC AACATTAAAN TTTTAANTTA GAAA 104

40 SEQ ID NO:2792
 SEQUENCE LENGTH:132
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03255
 45 SEQUENCE DESCRIPTION:
 GATCCAGTCT TAATTTGAGC ATGAGAGCAA AATTTAGTCA TCTACACAAG AAGCAAAAGC 60
 AAGGAATAGT TGTGGGTTT TNGTTTTTGT GTTGTGTNT TTTTTTGTN GTTAGGNANG 120
 ANGTGTTCCC GN 132

50 SEQ ID NO:2793
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EP 0 679 716 A1

SEQUENCE LENGTH:102
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
5 CLONE:HUMGS03257
SEQUENCE DESCRIPTION:
GATCCAGGTG GTGTTACATG TCCATTTTCAT GTTTGGGGG CTTTAGCCC NACAAAACAC 60
CTTCAGTAGA GCCTTGATTA AAAGGAAACC TGNAGACTCA AA 102

10 SEQ ID NO:2794
SEQUENCE LENGTH:100
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
15 CLONE:HUMGS03258
SEQUENCE DESCRIPTION:
GATCTTCCCC TAGGGGGCCC TCTTACTCCT NCCTCTCTCC TCCTCCTTCC CCATTGCTGT 60
AAATATTNA ACGAAATGGA AAAGAAAAA AAAAGACAAA 100

20 SEQ ID NO:2795
SEQUENCE LENGTH:100
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
25 CLONE:HUMGS03259
SEQUENCE DESCRIPTION:
GATCACACAT CAAGACTATC TACAAAANTT TATTATATAT TTACAGNAGA AAAGCATGCA 60
TATCATTAAA CAAATAAAAT ACTTTTATC ACAACACAAA 100

30 SEQ ID NO:2796
SEQUENCE LENGTH:98
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
35 CLONE:HUMGS03261
SEQUENCE DESCRIPTION:
GATCTAAATA CAAAGGATAT ACAGTCTTGA NTCTAAAATA ATTTGCTAAC TATTTTGATT 60
CTTCAGAGAG AACTACTAAT AAAAATCTAA AAGGTAAA 98

40 SEQ ID NO:2797
SEQUENCE LENGTH:97
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
45 CLONE:HUMGS03263
SEQUENCE DESCRIPTION:
GATCGTNCCT ATAAATAGTA GGACCAATGT TGTGATTAAAC ATCATCAGGC TTGGAATGAA 60
TTCTCTCTAA AAATAAAATN ATGTATGATT NGTTAAA 97

50 SEQ ID NO:2798

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EP 0 679 716 A1

SEQUENCE LENGTH:96
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
5 CLONE:HUMGS03264
SEQUENCE DESCRIPTION:
GATCACTAAA GTATATCTTT AATTCTGGGA GAAATGAGAT AAAAGATGTA CTTNTGACCA 60
TTGTAACANT AGCACAAANTA AAGCACTTGT GCCAAA 96

10 SEQ ID NO:2799
SEQUENCE LENGTH:93
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
15 CLONE:HUMGS03267
SEQUENCE DESCRIPTION:
GATCTGCTGT CTCCGTCCCT CCTGGGTCCC AGCAGCTGTC CTGCAGCTGT CAGCAGGAGG 60
GCCTGGCTTT AATAAAGAGT GGACAAACTG AAA 93

20 SEQ ID NO:2800
SEQUENCE LENGTH:93
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
25 CLONE:HUMGS03268
SEQUENCE DESCRIPTION:
GATCAAGTTC GAGGAGGCAG TCATCGCTCG AAACCGGGCC CTGGAGGGCC GCTNACCCTG 60
CCGGANATAA AGNATACAGA GAGCCCTCC AAA 93

30 SEQ ID NO:2801
SEQUENCE LENGTH:89
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
35 CLONE:HUMGS03271
SEQUENCE DESCRIPTION:
GATCCATTCT TGTATTGATA GATATTTGAA TGTTCAGT TTTCTATT ATGAATAAAA 60
CTGCTATGAA CATTCTTGTA TAAATCAAA 89

40 SEQ ID NO:2802
SEQUENCE LENGTH:95
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
45 CLONE:HUMGS03274
SEQUENCE DESCRIPTION:
GATCGACAGC GTCCTGGCCT AGGGTGCCGG GGCCTGAAGG TCAGGGTCAC CCAAGCAACA 60
AAGTCCCGAG CAATGAAGTC ATCCACTCCT GCAAA 95

50 SEQ ID NO:2803

55

SEQUENCE LENGTH:84
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03279
 SEQUENCE DESCRIPTION:
 GATCTCTACA GAGAGAAGTG GAAAATGCTG TATCAAGGGT GGGCTTAGCT GTGCCTTTCC 60
 AATAAGATG TGAGAAGCTT CAAA 84

SEQ ID NO:2804
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03281
 SEQUENCE DESCRIPTION:
 GATCTTTGCC CCTGGTATGC ATTTNTGGAC TCCACTGAAT CCTGNGAAAA AAAATTAAAC 60
 TTCCTTCTTA CTTGCCAAA 79

SEQ ID NO:2805
 SEQUENCE LENGTH:79
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03282
 SEQUENCE DESCRIPTION:
 GATCCTGTCA GTTCCATNAG CTATTCCTCT TTGGTTTGGC TTTTGATAT NATTAATAA 60
 ATNTTTAATT CCTTTTAAA 79

SEQ ID NO:2806
 SEQUENCE LENGTH:77
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03283
 SEQUENCE DESCRIPTION:
 GATCAATTTT TATAAAAATC GAGACAGTTC TGTGGTTAAA TCTACAAATT AAAGGGAAAT 60
 TAGAAGTTGG CGTGAAA 77

SEQ ID NO:2807
 SEQUENCE LENGTH:77
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03284
 SEQUENCE DESCRIPTION:
 GATCTATTTT ATGCATATTG TTTATAAAGA CACATTTACA ATTTACTTTT AATATTAAAA 60
 ATNACCATAT TATGAAA 77

SEQ ID NO:2808

EP 0 679 716 A1

SEQUENCE LENGTH:75
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
5 CLONE:HUMGS03286
SEQUENCE DESCRIPTION:
GATCTTCAGT AAGTCTCTCA GGCTCTCTGA GCTTGTTTCAT CCTTTGTTTT GAAAAAATTA 60
CTCAACCAAT CCAAA 75

10 SEQ ID NO:2809
SEQUENCE LENGTH:74
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
15 CLONE:HUMGS03289
SEQUENCE DESCRIPTION:
GATCCCTTCA CAGCAGTAAA CCAGCTCTTT GGAACCGATT CCATCACCCC AATAAAGGAG 60
CTCTTCACAG CAAA 74

20 SEQ ID NO:2810
SEQUENCE LENGTH:73
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
25 CLONE:HUMGS03294
SEQUENCE DESCRIPTION:
GATCTGTTTC TTTTAAATT TACACTTTN CTTCCGGTT TGCCGGAATA AACAGGACCT 60
TTGACATTG AAA 73

30 SEQ ID NO:2811
SEQUENCE LENGTH:66
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
35 CLONE:HUMGS03296
SEQUENCE DESCRIPTION:
GATCCATTCT AAGACTTATT GGCTGTTTGG AAGTGATAGC AAATAAAANC CACCTTGAAC 60
TGGAAG 66

40 SEQ ID NO:2812
SEQUENCE LENGTH:67
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
45 CLONE:HUMGS03297
SEQUENCE DESCRIPTION:
GATCCGAGGG GGAGGGGTGG GAAGGGGAGA AAATNAAATA AAAGATAATT ACTGAACACG 60
CCGNAAA 67

50 SEQ ID NO:2813

55

EP 0 679 716 A1

SEQUENCE LENGTH:63
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
5 CLONE:HUMGS03299
SEQUENCE DESCRIPTION:
GATCATTGAA TTTAAGGCC ACCCCAAGTC CAGANTGACC TCGCAAGACC CTTAACTCAC 60
AAA 63

10 SEQ ID NO:2814
SEQUENCE LENGTH:62
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
15 CLONE:HUMGS03300
SEQUENCE DESCRIPTION:
GATCTTTTGT ACTTNTNATA ACCTAATGTC AGACTAAGAA AAATAAAATA TCTGAGAGTA 60
AA 62

20 SEQ ID NO:2815
SEQUENCE LENGTH:60
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
25 CLONE:HUMGS03304
SEQUENCE DESCRIPTION:
GATCCCTTCG AGACTAANTC TGTTACCAGT CATGAAACAT TAAACCTAC AAGCCTTAAA 60

30 SEQ ID NO:2816
SEQUENCE LENGTH:68
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03305
35 SEQUENCE DESCRIPTION:
GATCTTTGTC TTTTGTCATG ACAAAGCATT TATTTAATAA AGTTATGCAN TCAGTTAAAA 60
AAANCAAA 68

40 SEQ ID NO:2817
SEQUENCE LENGTH:58
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03306
45 SEQUENCE DESCRIPTION:
GATCAGATT TTTATGCCAT CCTCATTAGT TTTCCAATAC AATATAAGTT GAAACAAA 58

50 SEQ ID NO:2818
SEQUENCE LENGTH:58
SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

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 TOPOLOGY:linear
 CLONE:HUMGS03307
 SEQUENCE DESCRIPTION:
 GATCTCAGAC TTCTGGCTTC CACAACTGTA ACAATAAATT TATGTCGTTT AAGCCAAA 58

10
 SEQ ID NO:2819
 SEQUENCE LENGTH:57
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03308
 SEQUENCE DESCRIPTION:
 GATCCACTGG GTGAATCCTC CCGCTCAGAA CCAATAAAAT AGAATTGACC TTTTAAA 57

15
 SEQ ID NO:2820
 SEQUENCE LENGTH:56
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 20
 CLONE:HUMGS03310
 SEQUENCE DESCRIPTION:
 GATCTGTGGT CATTGTCCCT CTGCAGAATA AAGATTGCTC AGGCCTGCCT GGCAAA 56

25
 SEQ ID NO:2821
 SEQUENCE LENGTH:59
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03311
 30
 SEQUENCE DESCRIPTION:
 GATCTTTGGT TTGTTTCAG GTTTGGTTAT TATNAATAAA GTTGCTGTGA ATACTTAA 59

35
 SEQ ID NO:2822
 SEQUENCE LENGTH:56
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03312
 SEQUENCE DESCRIPTION:
 40
 GATCTTCATT GGGGGATTGA GCAGCATTTA ATAAAGTCTA TGTTTGATT TTGAAA 56

45
 SEQ ID NO:2823
 SEQUENCE LENGTH:54
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03313
 SEQUENCE DESCRIPTION:
 50
 GATCTAAGAA ATAAAGAGAA ATGTTTCANT TTGCATTGAA ATAGGAAAAC GAAA 54

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SEQ ID NO:2824
SEQUENCE LENGTH:53
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03315
SEQUENCE DESCRIPTION:
GATCATNACT GGCTTTGCGC ATCGAGGGGC CATTAAAGAG TCTACTTTTC AAA 53

SEQ ID NO:2825
SEQUENCE LENGTH:52
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03318
SEQUENCE DESCRIPTION:
GATCTTTTAA AAAGTCAAG TGTGAATAC TAGAGGTTGT TAGACCNTTA AA 52

SEQ ID NO:2826
SEQUENCE LENGTH:51
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03319
SEQUENCE DESCRIPTION:
GATCTTGCCA CTGTAGTCCA GGCTGGGCTA CGGAGAGACC CTGCCTCCAA A 51

SEQ ID NO:2827
SEQUENCE LENGTH:54
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03324
SEQUENCE DESCRIPTION:
GATCCTTGCT GATAAATATA ACCATCAATA AAGAAGCATT CTTTCCAAA GAAA 54

SEQ ID NO:2828
SEQUENCE LENGTH:50
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03325
SEQUENCE DESCRIPTION:
GATCTCACCA CACTGCAACC TCTGGCGACA GAGCGAGACT TGGTTTCAAA 50

SEQ ID NO:2829
SEQUENCE LENGTH:50
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03326

SEQUENCE DESCRIPTION:

GATCCACCCA CTCTCTGAAA CTTCCTTGCT AATAAAACAT TCCTACTAAA

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SEQ ID NO:2830

SEQUENCE LENGTH:55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03331

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SEQUENCE DESCRIPTION:

GATCTTTTTT TTTCTTACA GACACCCATA ATAAATATC ATATTAAAT TCAA

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SEQ ID NO:2831

SEQUENCE LENGTH:53

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03332

SEQUENCE DESCRIPTION:

20

GATCCAGGGG GAAATGCTGG AAGCAATAA AACTGAGTTT TGAGAGCTTG AAA

53

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SEQ ID NO:2832

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03356

SEQUENCE DESCRIPTION:

30

GATCCACATA AAAAGAAATG TGAAGTTTTC TTTTACTATC TTTTCATTTA TCAAGCAGAG 60

ACCTTTGTTG GGAGGCGGTT TGGGAGAACA CATTTCTAAT TTGAATGAAA TGAAATCTAT 120

TTTCAGTGAA A 131

35

SEQ ID NO:2833

SEQUENCE LENGTH:431

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03374

SEQUENCE DESCRIPTION:

40

GATCTGCTGA TTGCATTATT TTAATTTGCT TTTCTGGGAA AGCAGTTTTC CTAAAAGCTG 60

TACAGACTTT TNCCTTTTGTA CCTAGCAGTA CTTTATATAG TATAGCTTTG GGCCATGTAG 120

CATTTTAAGA CTCAATTTTA AAAAATNATT AATCTGTTC TGACTCTTAA TTCCTATTTT 180

AATATGTGTT TCCTTGAAGA ATTCAGGATA CAACTTCTTG TGTATGACAG CTTTCCTTCA 240

45

CACACTATTT TNGTGGGTGT GTATATATCT GATTGTTGGAA GAATTTAAAA AACACATAGC 300

TTTNAATTN GTTTGAAACA GACTTTCTGC CTGTGACATT TNNGCNTTTA NCCAATTTAA 360

GAAGCCAATG GCATTTTNGG TTTTATATNG TGTTCCTCAC TAGTATATCC CTGTGGATTT 420

GTTTGTGCCC N 431

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SEQ ID NO:2834

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SEQUENCE LENGTH:429

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03375

SEQUENCE DESCRIPTION:

GATCCCATGG GTGGCACATT GGGACTTCTN TCCCTCCCC ATCTACACAG AAGACTGTCA 60
 CCATGCTGAC AGAAGCCTGT CCTTGTAAGG CCCAGCCTTC CAGGGGAACA CTCAGACATG 120
 TTCATTCTCT TCCTGCTTCT GCTCTGGGCC GGTGGGTGGC TCTCAGAAAA TACTTGCTGC 180
 TGGCAAAAGG CCTGTACTCA GGCATTTGCT TTGACTTGAT GTTGCCAAGG GACTGAGGCC 240
 ATTGGCAGGC TTAGTACCAC CTGCTCCTCA TCTTAGGAGT CTCCTTTTCA AATAATTAGG 300
 CTCTGTTCCC ATTTTAAAC TCTGATATTG GGCTTCACCT GTGACTGGAC ACTTTACTAG 360
 AGGCCCATTT NCACTAAACA NTAAATCTA AATAAATTGG AAGGAATAAC AACNACAAAG 420
 GGNTAGAAA 429

SEQ ID NO:2835

SEQUENCE LENGTH:427

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03376

SEQUENCE DESCRIPTION:

GATCTGGGCT TCCTNACTTC TGGAGAAGTG GCCATCCCAT GCCCACCTTT NCCATGGAGG 60
 AGTGGGCCCT GCCAGCTGCC ACAGCTGCAT GACCTGCTTC CCCACCCAC GGTGTCGTTT 120
 TTTTTTNAAG GGTACCTGT CCTCACTCAC CCAGCCAGCC CTTCAGGTGC NTTCTACTCC 180
 CAGTGCCAAA GCCAGACCAC TGGGGTTTCC TGCTGCAGGA ATTGGGGGCT GGGAACAGCA 240
 GAGGGGATAG AAGTNTGGTG GAGGTGGAGT GGGCAGCAGT TAGCCTACGG AAAGGNCCAT 300
 TTTTGGGNC CACTGAGCTG CACTGGGATT TTTCANTTCT GGNCTGANT NCCTTTAGGG 360
 NAAATAACAC AGCAGGACCN CGGTGGGGAT TTTAAGNACT TTTTTTNA GATTNAAANG 420
 GNTTCTN 427

SEQ ID NO:2836

SEQUENCE LENGTH:416

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03377

SEQUENCE DESCRIPTION:

GATCCTGATG CTGCCAGAGC CATTGTGGAT GCTTTACCAC CACCCTGTGA ATCTGCCTGC 60
 ACAGTACCAA CAGACGTGGA TAAGTGGTTC CATCACCAGA AAACTAATG AGATTCTCT 120
 GGAATACANG CTGATATTGC TACATCGTGT TCATCTGGAT GTATTAGAAG TAAAAGTAGT 180
 AGCTTTTCAA AGCTTTAAAT TTGTAGAACT CATCTAACTA AAGTAAATTC TGCTGTGACT 240
 AATCCAATAT ACTCAGAATG TTATCCATCT AAAGCATTTT TCATATCTCA ACTAAGATAA 300
 CTTTTAGCAC ATGCTTAAAT ATCAAAGCAG TTGTCATTTG GAAGTCACTT GTGAATAGAT 360
 GTGCAAGGGG GNGCACATAT TGGNTGTATA TGTTTNCNT ATGTTAGGGG ATAAAN 416

SEQ ID NO:2837

SEQUENCE LENGTH:398

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03378

SEQUENCE DESCRIPTION:

GATCAAAGAT GAGGCCACAA GGACACCAGC AACTGAAGAG GCTGCCTACT TGGTATCAAG 60
 ACTGAAGGAG AACTACGTTT TGCTGAGCAC TGATGGCCCT GGGAGGAACA TCCTGAAGTT 120
 TAAGCCCCCA ATGTGCTTCA GCCTGGACAA TGCACGGCAG GTGGTGGCAA AGCTGGATGC 180
 CATTCTGACT GACATGGAAG NGAAGGTGAG AAGTTGTGAA ACGCTGAGGC TCCAGCCCTA 240
 AGCCAGCCCT GCTCTGCCTA AGTGTACTCC AGAAGAACT CATCTCATCC AAATACACGC 300
 TATTGAGAAG GCGAGCCTGA CCTCCCTCTT ACAGATAAAG TCAGCTTTCA GAGGCTCAGG 360
 GTGGGGGGGC CTGCCGAGG CCATAATGCT ACCCACCN 398

SEQ ID NO:2838

SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03379

SEQUENCE DESCRIPTION:

GATCGCACAC ATGCTTTGTT TGGAATATGG AGTGAACACA ATTATGTACC AAATTTAACT 60
 TGGCAAACTT NCTATTGCCT GTCCCATGTG CATCTNATTT AAAATTTCCC CCATGGAAAT 120
 CACTCTCCTG TTGACTATTT CCAGAGCTCT AGGTGTTTAG GCAACGTGTG GTGTCCTGAG 180
 ANGGCCATAG CGCCATCATG GGCTGATTTT AATTACCAGG TCCCCCAGAA GCAGGTGGGA 240
 GGCTCTGCTT CTTGCTGGCC GTTCTGCAGC CTGGACCTGT GGACCCTGGT TGTAAGNGT 300
 AAATTGTTTT CTTANGGAAA CCAGTGTAC CTTNTNTNAA CCTTTAAANT TAAAAAATAN 360
 TTTGGGGGAA NAAATTNCNG NNACNGGAGG GTTAAAATTT ANCNANN 408

SEQ ID NO:2839

SEQUENCE LENGTH:388

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03380

SEQUENCE DESCRIPTION:

GATCCACCAG CTGAGCAGGG CGGGGCTGAG TAAATGCCGG CTTACCATCT CTACCATCAT 60
 CCGGTTTAGT CATCCAACAA GAAGAAATAT GAAATTCAG CAATANGAAN TGAACAAAAG 120
 ATTGGAGCTG AAGACCTAAA GTGCTTGCTT TTTGCCCGTT GACCAGATAA ATAGAACTAT 180
 CTGCATTATC TATGCAGCAT GGGGTTTTTA TTATTTNAC CTAAGACGT CTCTTTTGG 240
 TAATAACAAA CGTGTTTTTT AAAAAAGCCT GGNTTTTCTC AATACGCCTT TAAAGGTTT 300
 TAAATTGTTT CATATCTGGT CAAGTTGAGA TTTTAAAGA ACTTCATTTT TTAATTTNGT 360
 AATAAAAGTT TTNCAACTTT GATTTTAN 388

SEQ ID NO:2840

SEQUENCE LENGTH:80

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03381

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCTTGCTG AAAGTGTTC TAAAGATAGC ACCACTTTTT TTTNAAAGC TTTTATATAT 60
NAAAAAACGT ATCATGCAAA 80

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SEQ ID NO:2841
SEQUENCE LENGTH:384
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03382

SEQUENCE DESCRIPTION:

15

GATCTTGCTC TAGCCTTTTN ACTTTTGCAA TTTCAGTATC TTCATCTCTA AACTAGGGAA 60
ACACTNGGAT TCTTCTTAG CTGTGGGGGA AGGTATTTGG TTAGATGACT TTGAATGAAT 120
AGACTGCTGT GCTGAAAGAG CTTTATCACA CTGTCTCAAA GTATGTAAAG ATACATAGGT 180
GGATGCTCTT ACTGCAGCAG TCATGAATAC ATTTTtagcc ATTTACCTAA GGAAAAAGAC 240
AGTTTTTCTA GGTACCATGA AGGAAGATTG ACCCTGTTGG TATGCCTGTG GGGGTGGGAT 300
GTGAGTGGGA CTGATAAACT GATACTTTTG GTTCGTATGT ACATACTGGN AGAATCTTCA 360
TANTAAATGN GACTACACAA CAAA 384

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SEQ ID NO:2842
SEQUENCE LENGTH:376
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03383

SEQUENCE DESCRIPTION:

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GATCCAGGGC AAGGCCATTG GGATATTCTG AAACCTGAAT ATTTTGTTTT GTGCAGAGAT 60
AAAGACCTTT TCCATGCACC CTCATACACA GAAACCAATT TTNTNTNTNA TACTCAATCA 120
TTTCTAGCGC ATGGCCTGGT TAGAGGCTGG TTTTCTCTCT TTTCTTTGG TCCTTCAAAG 180
GCTTGTAGTT TTGGCTAGTC CTGTCTCTT GGAAATACAC AGTGCTGACC AGNCAGCCTC 240
CCCCGTGCC CTCTATGACC TCGCCCTCCA CAAATGGGAA AACCAGACTA CTTGGGAGCA 300
CCGCCTGTGA AATACCAACC TGAAGACACC GTTCATTGAG GCAACGNACA TAACAGNAAA 360
TGAAGGTGGA CANGCN 376

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SEQ ID NO:2843
SEQUENCE LENGTH:370
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03384

SEQUENCE DESCRIPTION:

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GATCCCAAAC CTAGCCCCCT AGTGGGACAA GGACCTGACC CTCCTGCCCG CATAACAAC 60
CCATTTCCCC TGGTGAGCCA CTTGGCAGCA TATGTAGGTA CCAGCTCAAC CCCACGCAAG 120
TTCCTGAGCT GAACATGGAG CAAGGGGAGG GTGACTTCTC TCCACATAGG GAGGGCTTAG 180
AGCTCACAGC CTTGGGAAGT GAGACTAGAA GAGGGGAGCA GAAAGGGACC TTGAGTAGAC 240
AAAGGCCACA CACATCATTG TCATTACTGT TTTAATTGTC TGGCTTCTCT CTGGACTGGG 300
AGCTCAGTGA GGATTCTGAC CAGTGACTTA CACAAAAGGC GCTCTATACA TATTATAATA 360
TATTGCTTN 370

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SEQ ID NO:2844

SEQUENCE LENGTH:367

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03385

SEQUENCE DESCRIPTION:

GATCTGTCAT CTGGTGCTGC CAGCTGTGCT CACTCTGGTT TTCTGCTCAG GGTCTGAAGC 60
 AGCTGTGTC TNCCTCCTCT GCCCCCATCC CCTGGCTCTC CCCTGGGCAC AGTGCCACTC 120
 CCTTGAAGG GAGGGAACCA CCCGTNAGCC CCAGGGCTTG GNAAGCCTGA GCGGTGNCT 180
 CTGCCTCTCC CTGCCCCCAG CACAATTGGC AGAGATGAGG CGGGTGGTGG ACGGCTGGGG 240
 GTGTCGTGGC AGGGTCTNGC ACAGGGNCAT GTCCTGGCTG TAACCCAGGC AGTGGGAGGT 300
 CTGCAAGCCT GGTATGGCC TTCACAGCAN GGTNCCTGTT GGACAGACAT ATCTGNATAT 360
 TTATNAA 367

SEQ ID NO:2845

SEQUENCE LENGTH:366

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03386

SEQUENCE DESCRIPTION:

GATCTCCAAC ACTATCCGAT AAAGTAGAAG CAACTGAGGT ACCGTGAAAG AGAAAGGAGC 60
 TGGAACTGAG AAAAAGCAGA GGATTCGGAC GGAGAGCGCG AGGACTCGGC GGCTGAGCGC 120
 GCCCGACAGC AGCTAGAGGC GCTGCTCAAC AAGACTATGC GCATTGCGAT GACAGATGGA 180
 CGGACACTGG TCGGCTGCTT CCTCTGCACT GACCGTGACT GCAATGTCAT CCTGGGCTCG 240
 GCGCAGGAGT TCCTCAAGCC GTCGGATTCC TTCTCTGCCG GGGAGCCCCG TGTGCTGGGC 300
 CTGGCCATGG TACCCGGACA CCACATCGTT TCCATTGAGG TGCAGAGGGA GAGTCTGACC 360
 GGGCCN 366

SEQ ID NO:2846

SEQUENCE LENGTH:365

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03387

SEQUENCE DESCRIPTION:

GATCCCCCA AGGNGAAGTG TGAGACAATG GTCTATCACC CCAACATTGA CCTCGAGGGC 60
 AACGTCTGCN TCAACATCCT CAGAGAGGAC TGGAAAGCCAG TCCTTACGAT AAACCTCCATA 120
 ATTNATGGCC TGCAGTATCT TTNCTTGGAG CCCAACCCCG AGGACCCACT NAACAAGGAG 180
 GCCGCAGAGG TCCTGCAGAA CAACCGGCCG CTGTTTGAGC AGAACGTGCA GCGCTCCATG 240
 CGGGGTGGCT ACATCGGCTN NACCTACTTT NAGCGCTGCC TGAATAGGG TTGGCGCATA 300
 CCCACCCNNG GCCACGGCCA CAAGCCCTGG GCATCCCCTG CAAATANTTN TTGGGGGGCC 360
 ATGGN 365

SEQ ID NO:2847

SEQUENCE LENGTH:364

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03388

SEQUENCE DESCRIPTION:

GATCTAGAGT ATGTTGAAGA AGATGGACAT GTGGTGGTAC GAAAACAATT CCCCTGTGGC 60
 CTGCTGGACT GGGTGGAACC AGAACAGGCT AAGGCATACA GTTCTTGA CTGGACAATC 120
 CAAGAGTGAA CCAGAATGCA GTTTTCCTTG AGATACCTGT TTTAAAAGGT TTTTCAGACA 180
 ATTTTGCAGA AAGGTGCATT GATTCTNAAA TTCTCTCTGT TGAGAGCATT TCAGCCAGAG 240
 GACTTTGGAA CTGTGAATAT ACTTCCTGAA GGGGAGGGAG AAGGGAGGAA GCTCCCATGT 300
 TGTTTAAAGG CTGTAATTGG AGCAGCTTTT GGCTGCGTAA CTGTGAACTA TGGCCATATA 360
 TAAN 364

SEQ ID NO:2848

SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03389

SEQUENCE DESCRIPTION:

GATCTGGGGA GGCAGGCATT CCTGAAGGGA ACTAGAGGTG TTACAGAGGA CCCTTACGTG 60
 AGAAATAGCT GAAAAGGGCA CTCGCAACCC TGGGCTGGGG AGGAGGAGAG AGTCCCAGAG 120
 CTCATCCCCC CTGCTGCCCA GTGCAACCA CTTNTCCATG CTGCAAAGGA GAAGCACAGC 180
 TCCTGCCAGG GTGAGCAGGG TCAAGCCTCT TATTCCAGGA GAAGGGGGCT CTGCCAGGC 240
 CCTACTACCN ATTGTNCCCT TCCTCTTCCT GCCCTTGGAA CCCCTNCCT GTCCCAGGGC 300
 CCTTCNAGCC CATTGCTGCC AAGGTGGAGG GANGGATAAA GNCACCTCTG GGTTTTGAAG 360
 CCN 363

SEQ ID NO:2849

SEQUENCE LENGTH:361

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03390

SEQUENCE DESCRIPTION:

GATCTGGGTG TGGCCAAAAA CAATTTTNTT TATTCTGTCT ATCAAAAGT ACTTCTACCA 60
 CTGTTTGGAG AAAATTGAAG AAAAGAATAA GATGATTAAA TGAATTCTCT AAAAGAACAT 120
 ATTTTAAGAG ACAGAACTTA GACATAACCA AGTAGTTGTA TACCTGATTG TAACAATCAT 180
 CTTTTATAAA AGCAAAATTA TGCATAAATG TAAAACACCC CTAACAAAG GGAACAAATG 240
 ANTTTTTGGT TATATTGTTT TCTTGGCTCA AAGTATCAAT TTATTATTAT AATAGAAATT 300
 TATAAGTTGC TAGAAAGTCT ATATTTTAA CGCACGGAAT AAAANTATGT TTTCTATTAA 360
 A 361

SEQ ID NO:2850

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03391

SEQUENCE DESCRIPTION:

GATCTGTCTC CAAGACCTTG GCCTCTCCTT GGAGGACCTT TAGGTCAAAN TCCCTAGTCT 60
 CCACCTGANA CCCTGGGAGA NAAGTTTGAA GCACAACCTC CTTAAGGTCT CCAAACCAGA 120
 CGGTGACGCC TCGGGGACCA TCTGGGGCAC CTGCTTCCAC CCGTCTCTCT GCCCACTCGG 180
 GTCTGCAGAC CTGGGTTCCT ACTGAGGCC TTTGCAGGAT GGAACCTACGG GGCTNGNAGG 240
 AGCTTTTGTG TGCCTGGTAG AAATATTTT TGTCCAGTC ACATTGGCCA TCACTCTTGT 300
 ACTGNCTGCC ACCGNGGAGG ANNCTGGTGA CAGGNCAAAG GCAGTGGAAG GAAAN 355

SEQ ID NO:2851

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03392

SEQUENCE DESCRIPTION:

GATCTAGTTC TACGTATTAC ACAGGTGTAA TATCTGTGAG TGTAATAAC TGGAACGTGA 60
 CACTGATTAA CATGNCAGTT TCTCTTTTGT TGTCTTATC TGTACTGTAT TATAGTATGT 120
 GGGTATAAAT ATCTACAAGT ATACACACAT ATGTNCTNGT ATTCCACTAT TGTAACCTGG 180
 AAGAAAGACT ATGNATNCCC TTTTNNAAAT CCGTACTGGT ATTNGTGTTA TTTAAAAAGC 240
 AAAATNCGGC TCTATTTAGT TGTATAATAT TAGAGGGTAC TNNGCTTGN CACAATTCCA 300
 AGTGGCCTTA GAGCATTGTT TAGCTNNCCG AAGTATATAT AANN 344

SEQ ID NO:2852

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03393

SEQUENCE DESCRIPTION:

GATCTATGAG CCTGTNTNGG ACAGCCAGAT GGTCATCATA GTCACGGTGG TGTCGGTNTT 60
 GCTGTCCCTG TTCGTNACAT CTGTCCTGCT CTGCTTCATC TTCGGCCAGC ACTTGCGCCA 120
 CNGCGGATGG GCACCTACGG GGTGCGAGCG GCTTGGAGGA GGCTGCCCA GGCCTTCCGG 180
 CCATAGCAAC CATGANTGGC ATGGCCACCA CCACGGTGGT CACTGGAACT NAGTGTGACT 240
 CCTCAGGGTT GAGGTCCAGC CCTGGCTGAA GGACTTGTNA CAGGCAGCAG AGACTTGGGA 300
 CATTGCCTTT NNTAGCCCGA NTACAAACAC CTGGACTTAA A 341

SEQ ID NO:2853

SEQUENCE LENGTH:567

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03394

SEQUENCE DESCRIPTION:

GATCTCAAGA CCAAAGACAG ATGTCAGTGG GCTGCTCTGG CCCTGGTGTG CACGGCTGTG 60
 GCAGCTGTTG ATGCCAGTNT CCTCTAACTC ATGCTGTCCT TGTGATTAAA CACCTCTATC 120
 TCCCTTGGGA ATAAGCACAT ACAGGCTTAA GCTCTAAGAT AGATAGGTGT TTGTCCTTTT 180
 ACCATCGAGC TACTTCCCAT AATAACCACT TTGCATCCAA CACTCTTCAC CCACCTCCCA 240
 TACGAAGGG GATGTGGATA CTTGGCCCAA AGTAACTGGT GGTAGGAATC TTAGAAACAN 300

GACCACCTTAT ACTGTCTGTN TGAGGCAGAA GATAACAGCA GCATCTNGGN CCAGTCTCTG 360
 CCTTAAANGG AAATCTTTAT TAATCAGNA TGGTTCACAG ATAAATTCTT TTTTAAAAA 420
 AANCCCANNC TCCTNNGGAT GCACANCCTG TCAAGNGTCT TTTTACACAC AANTTTCAGG 480
 TTTNNCATCA CGGGGCTTTG ANTTCNAGGA AATNAAAGGN GGGACAAATT TNGTTNGTTT 540
 ACNCTATGGT NCTTTNNTAA NAAACNN 567

SEQ ID NO:2854

SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03395

SEQUENCE DESCRIPTION:

GATCTTTACT TTTTACTTT TTATTCATCT TTGTGTTTTT ATTTATCTAA AATGGGTATT 60
 GATTTTAAGG ACGGTTTGA AAAAGAAAAG TGTTGGAAT GAAGCAAGTG ATTGATTGGA 120
 AAACATACTG AATGGAAGAA ATATTTAGAT TAAAAATGAG GTAGGTTGAA GTTCTNCTC 180
 TGAATNATA GATAAATGGT GAAGATAAGG CTTATTGTGA GGNITCAGTG AGGTAATATA 240
 TGCAAGTAC TTACAATGTT CTGGCACATA GTAATTNATT NNGANAATCG AGCACCTTA 300
 ATTACCTAGA ATGCAGGGTT GTTAGTTTTT NGGTTGACTT TTGTTTTNN 349

SEQ ID NO:2855

SEQUENCE LENGTH:334

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03396

SEQUENCE DESCRIPTION:

GATCCGCTGT ATTGTGGAGT ATCAGAACAA GGGCCGCGGG AACGAGNGCG TGCAGTACCA 60
 GCATGTGTTA CATAGAAATC TCATTTATTT GGCTACCATT GCAGATGCCA GTCCAACCAG 120
 CACTTCAAAA GCAATGGAAT AATCTTTCAA AAGCAATAGA ATAATCTTCC ATTTGGCTGT 180
 CGTGAGGAGT AATTGAATGT AATCCATCTC TTACAAAATG GAGACAGGGT CTTTACCAAC 240
 TCAACTGGTT AAAACATGAN TGAAACCTCT GTGGCTCTTT CAAAACGTGG AAAATGTGAA 300
 GAANGCTACT TAACTNNGC TGTATTCTCA TGGN 334

SEQ ID NO:2856

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03397

SEQUENCE DESCRIPTION:

GATCGGCCTG CTGCTCCGCA ACTTCGACCG CTACGGCGTG GAGTGCTGAN GGACTCTGCC 60
 TCCAACGTCA CCACCATCCA CACCCCGGAC ACCCAGTGAT GGGGGAGGAT GGCACAGTGG 120
 TCAAGAGNAC AGACTCTAGA GACTGTCAGA GCTGACCCCA GCTAAGGCAT GGCACCGCTT 180
 CTNTCCTTC TAGGACCTCG GGGTCCCTCT GGGCCAGTT TCCCTATCTG TAAATTGGGG 240
 ACAGTAAATG TATGGGTCG CAGGGTGTG AGTGACAGGA GGCTGCTTAG CCACATGGGA 300
 GGTGCTCAGT AAAGGAGAGC AATTCTTACA AA 332

SEQ ID NO:2857

SEQUENCE LENGTH:331

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03398

SEQUENCE DESCRIPTION:

GATCCTGGGT GTNTNTGTAA GGGTNTTGCC AAAGGAGGTT AACATTGGAC TCANTGGGCT 60
GGGGAAGGC AGACCCACCC TTAATCTGAG TGGACACCAT CTAATCAGCT GCCAGCGAAA 120
ATAAAGCAGG CAGAAAANTG AAAAANNTAG ACTGGCCTAG CCTCCCAGCC TACATCTTN 180
TCCCATGCTG GATGCTTCCT GCCCTGAAA ATTGGACTCC AGGTTCTTNA GTTTTGGGAC 240
TTGGACTGGC TCTCCTTCCT CCTCAGCCTG CAGACATCCT ATTGTGGGAC CTGTGTGTTT 300
TGTAAGTTCA TACTTAATAA ACTCTCCATA N 331

SEQ ID NO:2858

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03399

SEQUENCE DESCRIPTION:

GATCGAGTCT ATACGCTGAA GAAANNTGAC CCGATGGGAC AACAGACCTG CTCAGCCCAT 60
CCTGCTCGGT TCTCCCCAGA TGACAAATAC TCTCGACACC GAATCACCAT CAAGAAACGC 120
TTCAAGGTGC TCATGACCCA GCAACCGNGC CCTGTCCTNT GAGGGTCCCT TAAACTGATG 180
TCTTTTCTGC CACCTGTTAC CCCTCGGAGA CTTTCGTAACC AAACNTTTCG GACTGTGAGC 240
CCTNATGCCT TTTTGCCAGC CATACTTCTT TGAGCATCCA GNNTNTNGTG GCGATTGAT 300
TATGCTTGTT GTGAGGNAAT CATGGGTNGG CNTCNCCNT TAANGGGGTG N 351

SEQ ID NO:2859

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03400

SEQUENCE DESCRIPTION:

GATCCTGGGG GCCTGGGTG GGGGCTAGGG AGACGCCATG TGATGGACAC TCCAGGGACA 60
CACAGCCTAG CACAGCAGCT TATAATGGGC TCTCCGGGGC CATTTGCAAT AACAGCTGCA 120
ATTCCCTGGA TAGACGAGTT GATTTCTCC CTCTGCCCCT CCCCAGCCA TGCCAGCTGG 180
CCTTTGTAAG TGCAGGAAAC CGAGTAGAAA ATGTGACCCT CCAAATGGAG AAGCTGCAGG 240
CTTGCCATT GTGAACCATG GTGAAGTCT TGGAAACATAC TGTTCACTCA CTCTAAAGGN 300
GCTGAGACTG TGCTGTTGTT CTCGTTTTN 330

SEQ ID NO:2860

SEQUENCE LENGTH:330

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03401

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCTGGAAA GGACATGACT TCTGAAATAG CCGCTGCTGG GTTTTAAAAG CTGAGGTCTC 60
TCAAAGTGTG GAGGAGACGT TGCCGTCAGN GGGAGCCAAG TGCCGGGAAG ATGTCTATTT 120
TTTTCTTGT GTATTGAAAA TCATGATGTT TGTTATGACT GCTGATGCCA TTGTNTTGT 180
AAATNTNATT GTGGCATATA CAGTATTGTC ATACAGTTGA AGAGAAACAA TGTTCCTAA 240
TGTAAGTNCT CTGAAAATGT TGACACTGTA TATATATATA TNAGGATAGT TTGTNTTCN 300
NTGTTTGGGG TTTNNNTTN TTTGNTGN 330

10 SEQ ID NO:2861
SEQUENCE LENGTH:396
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03402

15 SEQUENCE DESCRIPTION:
GATCTTAAAC CCAAAGTACG AGAAATGTTT CTGTTGAATG TAATGCTACA TGAATGCTTG 60
ATTTATCAAG CGCCAAAAG GCATTGTATA GTAGGAAATG TAAGTGGGGT GGCTTATGGC 120
TTCTTTATCC TCTGATTCTA GCACTTTCAA GTGAGCTGTT GCGTACTGTA TCATATTGTA 180
GCTATTAGGG AAGAGAAGAA TGTTGCTTAA GAAAGAACAT CACCATTGAT TTAAATACA 240
20 AGTAGCAGGG TATTGCCCTT GATTCAACTG TTTAAGTCC TCATTTTCT CAAACTAAGT 300
GCTTGCTGTT CCCAAATATG GCAAGGNATA GCTTTTACAC TTTTCCCTG CCAACANNTC 360
NTNGATTGGC TTGCAGANA TNNAGGTTTG ANTTGN 396

25 SEQ ID NO:2862
SEQUENCE LENGTH:330
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03403

30 SEQUENCE DESCRIPTION:
GATCCAAAGT GACCCACCA GGGGACAGCC AGAGGAAGGG GACCATGGGG TATCCNAGT 60
GTCCTGGTCT ATCACCACAG CTCTTTGTC CCCAGTACC CCCAGCCCAG CCAGCCAATA 120
AGAGGACACA AATGAGGACA CGTGGCTTTT ATACAAAGTA TCTATATGAG ATTCTTCTAT 180
35 ATGTACAGA GTGGGGCAAA ACACGCCCCC ATCTGCTGCC TTTTCTATTG CCCTGCAACG 240
TCCCATCTAT ACGAGGTGTT GGAGAAGGTG AAGAACCCTC CCATTCACGC CCGNCTACCA 300
ACAACAAACG TGCTTTTTTC CTNTTTGAAA 330

40 SEQ ID NO:2863
SEQUENCE LENGTH:329
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03404

45 SEQUENCE DESCRIPTION:
GATCTTATTT TCTGAGAAAT TGATAGCAAA TATGCCAGAA AGTGGACCTA GTTATGAATT 60
CCATCTAACC AGACAAGAAA TAGTATCATT ATTCAACGCA TTTGGAAGAA TTTCTACAAG 120
TGTGAAAGAA TTAGAAAAC TCAAGAACTT GTTACAGAAT ATTCAATAAA GAAAACAAGC 180
50 TGATATGTGC CTGTTCTCG ACAATGGAGG CGAAAGAGTG GAATTCATT CAAAGGCATA 240
ATAGCAATGN CAGTCTTAAG CCAAACATT TATATAAAGT TGCTTTTGT AAGGAGAATT 300

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ATATTGTTTT AAGTAAACNC ATTTTAA

329

SEQ ID NO:2864

SEQUENCE LENGTH:329

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03405

SEQUENCE DESCRIPTION:

GATCACTTCA GCTGCCTGCT GTGGACAAAG AACATCAAAT TACAGCATCA CGAGTGCTAT 60
 TTTTGCTGT GGTGGTCTCC CTGTCCAAGC GGGNCCGCTT TGCAGAGACC AGAGGCATAT 120
 CGCGGCTTGA GCTGAAAATG CATTNTTTC AGCTTAGGTT GAATTATTT NCGTTTGCTC 180
 TTTCTTCTAC ACGCGCCTGA TGGATAGTGA ACCTATTCAT CAAAAAAGTG CACTGCTCTN 240
 CTGTCTATTG TACCGACTTA ACCTCTTCCA CCCAAGTCCG CATCTGTGTG TATCATCAAT 300
 AAAGTTGGTN GTGCCTTGGN TTGGGCAAA 329

SEQ ID NO:2865

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03406

SEQUENCE DESCRIPTION:

GATCGGCGTG ACCACCCCTT GCCGGAGGTG GCCCATGTNA AGCACCTNTT TGCCAGCCAG 60
 AAGGCACTGA AGGAGAAGGA GAAGGCCTCC TGGAGCAGCC TCTCCATGGA TGAGAAAGTC 120
 GAGTTGTATC GCATTAAAGT CAAGGAGAGC TTTGCTGAGA TGAACAGGGG CTCGAACGAT 180
 NTGGAAGACG GTTNTNGGGC GGTNCCATGT TCTTTAATCG GTTTNAACGT GCTCGTTNCC 240
 CCTNTGGAAA AAGGNCTTNT GTTTACCGGC CCCCTTCCCG AAAAGTTTTN AAAAAANGGT 300
 GGGGTTGCCC AAGNAGGCC AANAGGNN 328

SEQ ID NO:2866

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03407

SEQUENCE DESCRIPTION:

GATCTACAGA GTTAGAAATT CGAAAACTAT TCCAGGACTA ATTCTTAATC GGCATTATTT 60
 ATACAAGAGG TCAAGTAACA TTTACTAGCG CAATACTGCA CTTGTAAATG AATTATAAAC 120
 GCTCTTCTGG AATATATTTA AATAACCATT AAAGAACTGC TTATTCATNC TGGACACTGC 180
 ATGTNGATGT TGAATCAACT GATGCCAGCA GAAAGCTATT TTGATTTGTG AACATACTGC 240
 CTTATTTAAA GGGTCCTGAT TGCTTGATTT TTANGNCATT CATTAAAAAG AAACCAGGAA 300
 ACACTTTGA ANTAACAGCA TANGGGN 327

SEQ ID NO:2867

SEQUENCE LENGTH:327

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03408

SEQUENCE DESCRIPTION:

GATCACCCCTC CTCCCAAAAA GCAAGAGCTT GTTTATGGCT GAGGAATCGG CGGATTGTCT 60
 GAATGACACA TATACAGAGC CCCCACGGAT TTCTNCACAC TCTGGGTCTG TGCTGGTGGA 120
 ACATTGCCAA TNAGTTCTTA ATGAGGCACC TGTGTGTAAA TACATGCTTG GTCTTCTCTG 180
 CAGAGAACTG AGGCTAAACT CTGTCCCTAC TTCTGGTTTT GCCCTGTNAT GTCGTAACGA 240
 GGTGGGCCCTT TTGAGGCCAT TTTAGTTTGA GTTCGAGCCA ACCACCTCTG GTTGGTTAGA 300
 TGATTGAATA AAAAGGTTCT GAAGAAA 327

SEQ ID NO:2868

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03409

SEQUENCE DESCRIPTION:

GATCCAATCA CCTCCCACCA GGCTCCACCT CGAATACTGG GGATTACCAT TCAGCATGAG 60
 ATTTNGGCAG GAACACAGAC CCAAACCATA CCACACACAT TATCATTGTN AAACCTTGTG 120
 AAGTATTTAA GGTACATGGA ACACACGGGN AGTCTGGTAG CTCAGCCCAT TTNTTTATTG 180
 CATCTGTNAT TCACCATGTA ATTCAGGTAC CACGTATTCC AGGGAGCCTT TNTTGGCCCT 240
 CAGTTTGCGAG TATACACACT TGCCANGTAC TCTTGGTAGC ATCCTGTTTG GTATCATNGC 300
 ACTGGGTCAC ATTGCCTTAC CTAAAN 326

SEQ ID NO:2869

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03410

SEQUENCE DESCRIPTION:

GATCTATGGA ACAGAGGAGG AGCGATGCAG TTGGGAGAGG AAGCTAGAAG GGTATGGTT 60
 GGAGTTCTGT ACAGTGTGGA GTTCCGACA GGGAAAGAGG ATTCTCCAA TGCGCCTAGA 120
 GAGAAAGCCT GAGCAGGAGA TGATGCAGCA GAGGGGAAGG GCCCTGTGGT GCCGCCGCCC 180
 TTCCTTCAGC CTCCGAAGGT GATGGAAATG GAGAGTGGAG GACCAGGCCT CCAGCTGTNT 240
 GGCCTNGCCN TTCACGCCTT AACACTAAGC CCACCTCCCC TTNTCTCCTT CCCAGCATTG 300
 AGCCCTTGGT TGCCTGGGCC CAGGN 325

SEQ ID NO:2870

SEQUENCE LENGTH:325

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03411

SEQUENCE DESCRIPTION:

GATCTTCAGA AACCTTGCTA GGAGAAGTTA ATGAAAATAG AGTATCAATA GCATTGAAAA 60
 AAACCTCTGA AATCCTTCAC GATATTGACT GTCTTCTATC AAACCTCTAA AAGTGAAAAA 120
 TGGAATTATT ACAACATATT ATTAAGTTT AAGGATGTTG TTTCAAGTGA CTGGTATAAA 180
 ATTACTAGTA AGCCAAGATA TTGTACGTAT TACCCCGGCA CAATGATTGT GAAAGANCTG 240

ACATTTAACT TTGAAGGTAT TTTTAACTTG TACATTTTAA AAATATGTAT TTATATCTNA 300
NTANTAAATN TTTCGAAGTT TAAAA 325

5 SEQ ID NO:2871
SEQUENCE LENGTH:325
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03412
10 SEQUENCE DESCRIPTION:
GATCCAAGCG GAGATTGACG CTGCAGCGGA NACTCATCGA CTTCTTCCGG TTCAATGCCA 60
AGNATGCGGT GGAGCTGGAG GGGCAGCAGC CCATCAGCGT GCGCCCGAGC ACCAACAGCA 120
CGGTGTACCG GGGTCTGGAG GGCTTCGTGG CGGCCATCTC GGCNTTAAAC TTCACTGCAA 180
15 TCGGCGGCAA CCTGGCGGGG GCACCGGCCC TGATGCTTCG AGAGGGAGTT GTGACTCTGC 240
CTCTTTGCCA GATGACAAAA CTGAGACACA CAGCCGTGAC TTACTTGGCA AGACTGAGTG 300
ACTAGTAAAT AAATGATGGA GCAGN 325

20 SEQ ID NO:2872
SEQUENCE LENGTH:323
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03413
25 SEQUENCE DESCRIPTION:
GATCCTCCTT CTAGCTCATC TGTAGATACT AGTAGTAGTC AACCAAAGCC TTCAGACGA 60
GTAAGACTTC AGACAACATT GAGACAAGGT GTCCGTGGTC GTCAGTTTAA CAGACAGAGA 120
GGTGTGAGCC ATGCAATGGG AGGGAGAGGA GGAATAAACA GAGGAAATAT TAATTAANTG 180
GTCTGTAAAC AATAACAAC GTGAATAAGA TTATCAAATC TTTTTAGTG TAATGATTGT 240
30 CAAGTTTAAA ANCATTTTNN TATATAACCT GGTATACTCA TGTCAATATN CTTTATTAAT 300
AAAANGNTTT TCAGTGTCAT AAA 323

35 SEQ ID NO:2873
SEQUENCE LENGTH:322
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03414
40 SEQUENCE DESCRIPTION:
GATCTGCCCC TCTCAGCCTC CCAAAGTGCT GGGATTACAG GTATGAGCCA CAACGCCCAN 60
CCATCATTTA TCTTTTTCAC TCATTTTTTC ATGAGTATGC AGAGGAGTTT TCAAGAGGCT 120
ATCTGGTGTG ATATTGTAAT AGGCTGAATG CAAAAGCAGA TACAAGATTC CAGCTTTCGT 180
CTGTCATCAG ACATTGAAGA GATTTGGAGA AATGTAAAGC AGCAGTACTC TTCTACTAA 240
45 TTTTGTGTGT GGTAGTTAG AAAAATGGTT ATTTTNAGTG GGTTTTAATA TGTGAAAAAA 300
ATAAAATTAG CTATTTGCCA AA 322

50 SEQ ID NO:2874
SEQUENCE LENGTH:319
SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03415

SEQUENCE DESCRIPTION:

5 GATCACCTNT GGCCTGTTCC TNCCTAAACN GCATAGCCCC AATCTAATAT CATCCCGAGG 60
 AAATACCAGA CACACGCAAG GGAAAGGACA TTCTACAAAG GAACGGACTC ATACTCTTCG 120
 AAAAGTGTC AAGTCATCTA CGACAAAAGA CTGAAAGGAC CCCAGTCGAA AAAAGNCAAG 180
 ATGACAAANT GCAACGTTTC ATCCTAGACT GGATTCTGGA CCCAAAAAT CCCCTTCTTT 240
 10 TGTCAGAAAG GAAATTTGTG GAACAACCTGG CAAATCTGG AGTTGGGTCT GCAGATTACA 300
 CACTGGTATC GCAGCGAAA 319

SEQ ID NO:2875

SEQUENCE LENGTH:320

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03416

SEQUENCE DESCRIPTION:

20 GATCTCCCTT CGTGGAGACG ACACCGGGGT CCTCCTGCCC ACCCCAGGGG AGGCCAGGA 60
 TGCTGATTTG AAGGATGTAA ATNTNATTC AGCCACCGCC TGACCATCCG CCATTCCGAC 120
 TGCTAAAAGC GAATGTAGTC AGGCCCTTT NATGCTGTGA GACCTCCTGG AACACTGGCA 180
 TCNTGAGCC TCCAGAAGGG GTTCTGGGCC TAGTTGTCCT CCCTCTGGAG CCCNGTCCTG 240
 25 TGGTCTGCCT NAGTTTTNCC CTNCTAATAC ATATGGCTGT TTTCCACCTG GNTAATATAA 300
 CCANGAGTTT GGGCCGNAAA 320

SEQ ID NO:2876

SEQUENCE LENGTH:308

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03417

SEQUENCE DESCRIPTION:

35 GATCTCTGCT GTGNCTCCCA GAGTTACTGC TGCCAGACTG AACTGGAAGG GGAGGATGTA 60
 GGAGCCTGCA CAGCTCACAC CTACTCCTGT GGCTCTGGAG TGGGCATCTN CCTGAGAGTA 120
 CGGGAATGTN AGGTGCTATT TTAAGCTGGC AAAACCAAAG GCTGTTTTNA TTCTCCTCCT 180
 TACCTTGATG ACTATGGGGA GACCGACCAG GGACTIONAC GGGGAAATCC TTTACATTTA 240
 TGCAAAGAGC GATTCAAGAA GATTCAAGAG CTCTGGCACC AACACAGTGT CACAGNGGAA 300
 40 NTTGGNCN 308

SEQ ID NO:2877

SEQUENCE LENGTH:308

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03418

SEQUENCE DESCRIPTION:

50 GATCTTGACC ATGACAGTTT TNCCTTTTA ATGAAACGGG GAACCAAGAG GAACCTACTT 60
 GTGTAACNA CAATTNCTGC AGAAATCCCC CTTCCTCTAA ATNCCCTTTA CTCCACTGAG 120
 GAGCTAAATC AGAACTGCAC ACTCCNTCCC TGATGATAGA GGAAGTGGAA GTCCCTTTAG 180

55

GATGGTGATA CTGGGGGACC GGGTAGTGCT GGGGAGAGAT ATTCCTTAT GTTTATNCGG 240
 AGAATTTGGA GAAGTGATTG ACCTTTTCAA GNCATTGGGA AACAAATAGA NCACANTATA 300
 NTTNNCN 308

SEQ ID NO:2878

SEQUENCE LENGTH:307

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03419

SEQUENCE DESCRIPTION:

GATCTAGAAG ACGATTAAGG GAAGGTCGTT CTCAGTGAAA ATCCAAAAAC CAGAAAAAAA 60
 TGTITATACA ACCCTAAGTC AATAACCTGA CCTTAGAAAA TTGTGAGAGC CAAGTTGACT 120
 TCAGGAAC TG AACATCAGC ACAAAGAAGC AATCATCAAA TAATTCTGAN CACAAATTTA 180
 ATATTNNNT TNCTGAATGA GAAACATGAG GGNAATTGTG GAGTTAGCCT CCTGTGGTAA 240
 AGGAATTGAN GAAAAATNAA CACCTTACAC CCTTTCCAT CTTGACATTA AAAGTNCTGG 300
 CTAAC TN 307

SEQ ID NO:2879

SEQUENCE LENGTH:307

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03420

SEQUENCE DESCRIPTION:

GATCTTGAGG GCAGACAGCA GAATTCCTCT TATAAAGAAA ACTNTTTNGG AAAATACGTT 60
 GAGGGAGAGA NGACCTTGGG CCAAGATGCT AAATGGGAAT GCAAAGCTTG AGCTGCTCTN 120
 CAAGAGAAAA TAAGCAGGNC AGAGGATTN CTCTGGACAG AGATGGAAGA GCCGGGAACA 180
 GAGAAGTNTG GGGAAAGAGAT AGGAACCAGC AGGATGGCAG GGGNNNNGG CTCAAGGGTN 240
 AGGAGGCCAG TGGGACCCCA CAGAGTTNGG GGAGATAAAG GAACATTGGG TTTGCTTTGG 300
 TGGCACN 307

SEQ ID NO:2880

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03421

SEQUENCE DESCRIPTION:

GATCTGCCGT GTCCTTATAA AGTGGATGAA AAATGTTTGG TACCCATCTG GAAAACCAAC 60
 AACTTGAAAT CTCAGGTATT CCAGGTCAC T GACATGAATT TGAAGATATA TCTATCTGTA 120
 TGGATATATA TCTATATGTA TATAGATATA TAANTACAGA GAGATATCTG GCTTGGTTTT 180
 AATTATGTNC TTAAATTGTG GTGCCAATAA TTGCATATAG ATTTTNTTNC TTAAATATT 240
 GACTGTGGAA CATGCCATTT TAAATATGTN GTAAGGCCCTG TNNTAATAAA ACGTTTAGTA 300
 TGA AAA 305

SEQ ID NO:2881

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03422

SEQUENCE DESCRIPTION:

GATCCACTGA TGGCTCCAGA CCCCAACTTT AGCCATTGCA CGTGTGAAC TCCAGGTTGA 60
GCCTTTGCTG GAGCCGCCTG CAAGGNGCAT GTTTGACCAA TCCCCAGTGG AGGGGAGGGT 120
GGTGTTCCT TTCTGGGACT TCCACAAGTT GAGAACAGAC CATGCTGCCC TGGGCAGTTC 180
TTGAAGGCTG TGAGAGTGGG CCTGACAAAG TTTATTCCTT TTTTTTTC CATTNCCTT 240
TATNATNATA ATTGTTTGAA ATNGNCAANT AAAAATNATG TATATTTATG ANGTNCANCA 300
NGAAA 305

SEQ ID NO:2882

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03423

SEQUENCE DESCRIPTION:

GATCAGGAAA GTCATACTGT TCACCTTCAA GNTGGCTGTC CCCCCGCGG AGCCCCCCA 60
CCCCCATATG TACAGATGAT ANTAGGGTGT GGAATGTCGT CAGTGGCAAA CATTTACAG 120
ATTTTATTT TGTTCTGTC TNNANCNTT TTNCACTGT GCTAATAGT ATATTCAGTA 180
CATGAAAAGN TACTACTGTG TTGAAAGCTT TTTAGGAAAT TTTGNCAGTA TTTTGTACA 240
AAACATTTTT TTGAAAAAT ACTGGTTANT TTATNCTATT TTAATTNGCC AATGTCAATA 300
AAN 303

SEQ ID NO:2883

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03424

SEQUENCE DESCRIPTION:

GATCACCGGA CACAATCCTG CAGAAGGACA CACGACTCTA TTTCTACAG TGCGAAACTT 60
GTCATTCTAG ATGTNCTGTT GCCAGTATCA AAACCGGCTT CCAGGCTGTC ACGGGCAAGC 120
GAGCACAGCT CCGTGCCAAA GCTAACTAAT TTGCTAATCA CTGATTTNC AAAGCTTGTT 180
GTGGAGATGT GGCTGGACAG GTTTGCCATC AGAGTGGATA TACCGTTGTA TAAAAACAA 240
GATAAAAAAG CTGCCAAGAT TTTTGGCGNG TGGTTGGTCT GAAGTCCTTG CAAGACGCTG 300
NTGCTAAGC TGTTGACATA CTCATTGGCC TACTTTTAAC ACCTGTCCAG AGGAAACGTG 360
NTATGGGGGT AAGTN 375

SEQ ID NO:2884

SEQUENCE LENGTH:301

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03426

SEQUENCE DESCRIPTION:

GATCAGATAG GAGCACAAGC AGGGGACGGA AAGAGAGAGN CACTCANGCG GCAGCATTCC 60

5 CTNCCAGCCA CTGAGCTGNC GTGCCAGCAC CATTCTGGT CACGCAAAAC AGAACCCATT 120
 TAGCAGCAGG GAGACGAGAA CACCACACAA GACATTTTC TACAGTATTT CAGGTGCCTA 180
 CCACACAGGA AACCTTGAAG AAAATCAGTT NCTAGGNNNN GCTGTTACCT CTTGTTTACA 240
 GTTTATATAT ATATGATAGA TATGNGNTAT ATATATAAAA GGTACTGTTA ACTACTGTAA 300
 A 301

10 SEQ ID NO:2885
 SEQUENCE LENGTH:297
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03427
 SEQUENCE DESCRIPTION:
 15 GATCGGGGGA GGGTAAATAA TGCAAAATTT GCACAGTGGG AGAAGGGGTC TCACAAAAAG 60
 CAATCCATCC TGTAGTATAG GTANNNGNGT TGGGGGAAGC AGCTTCCATT CTGGATGTTT 120
 GGAACCCCTT AGCTTTGTTT TGGAATGGCC CACCATTCTC ACTGGAAAAC AGTGGTCTGC 180
 TGTGAAAGGC CAGCTCTCGG CAGCCCCTGT GGTTCAGCG CTGCCGCTCT GTGTCATTCA 240
 GGTGTGCAC ATTGTTTTTC TTCTGACTTC CAGAAATAAA AGTGTTCCTCA TGGGAAA 297

20 SEQ ID NO:2886
 SEQUENCE LENGTH:296
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03428
 SEQUENCE DESCRIPTION:
 GATCTGGGTG CCTTGGGAGA NCCAGTCCTT CCTTTNACC CACCCCAGGA AGATGGAGTN 60
 CTCTTTNCTA GGGCATGTC CTGCCAGCAA CCGGGATGCG TGGGCACTG GACTCTGCAC 120
 30 GGGGTCTAC AGGTTGAGGG AGGTTGGTCA CAATNAGAAC CTCGGGGTTT GAGGTGGCCA 180
 TGGGCAGACA GCCNNAAGGG AGGGAGGGTG TGGGTGTNCG TGTGTGCATG TCCTGGTNTG 240
 TAAGGGGAA AGGGTCTTTC CTGGTTTTAT TAAATAAAG TAGTTTATGT AACAAA 296

35 SEQ ID NO:2887
 SEQUENCE LENGTH:296
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03429
 SEQUENCE DESCRIPTION:
 GATCTGTGCN GTGGTCCTNA GGCAGTTGTN TCCACACAAG TACTACTTCC TCGTGGGCTA 60
 CAGTNAAACT TTGCTGTCCT ACTTTAACAA ATGTCCTGTG CGACTCCACC TCCAACTGT 120
 GCCCTCAAAG GTTGTGTATA AGTACCTCTA GAACAATCCC CTTTTNCCA TCAAGCTGTA 180
 45 GCCTGCAGAG AATGGAAACG TGGGAAAGGA ATGGTATGTG GGGGAAATGC ATCCCCTCAG 240
 AGGNCAGAG CATAGTCTCT CATCTGCTAT TGANTAAAGA CCTTCTATCT TGTAAA 296

50 SEQ ID NO:2888
 SEQUENCE LENGTH:356
 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03430

SEQUENCE DESCRIPTION:

5 GATCTACTCT GTATGGGTAC CAAAATCACC TTCTCTCTTC AAGTCAAAGT TGAATTTAGA 60
 ACTTTGAATA CAGGTCAAAA AATGTAGAAA ATATCATTTT ATATTCCTTA ATCTATATAG 120
 CTGAAAAAGG GTTGTATTTT CTTAGCTGAA TATGAATACC TCTTAAACAT AAATTAGTTC 180
 CTCTCCAGTG AAGTATCTTA TTTTACCAAT CCATTTCAGG AAAGAGGTTC TGCTGCCGTA 240
 10 AAGGCAGAAA TTTTATTTT ATCCCTTTTA TTTGAATGAG AGATTTGAAA ATCGAATTAT 300
 GTAAATATTT CAATGCATCT GCTATTATTT TGTGGAGTTT ATTAACTAC TTTAAA 356

SEQ ID NO:2889

SEQUENCE LENGTH:293

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03431

SEQUENCE DESCRIPTION:

20 GATCCCAAAC CAAATCTTAG AATCANTTCA TTTAAAATAC TGAGCGGTAT TGANTACTTC 60
 GAAGCAGAAC AGGCAATGTG CAGCCCTCAT TTATGAGAAA ACCCTCAGGA AACTCCCAGG 120
 GTGATGCTTG GNGAAGCTGT GAGTTGAGCT GAAGCTGGAG AACTTCCTCC AGAGCAAAGG 180
 GCTTAAGAAA GAAAGANGAA CTCTAAGCTG GGTCTGCTAA CATCACTCCA GTTAGATGG 240
 NTCCTGTTTT TCCTTAACAN GTTGAGGCGT GGGTAGAGCA GGANTTGGTT TTN 293

25 SEQ ID NO:2890

SEQUENCE LENGTH:289

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS03432

SEQUENCE DESCRIPTION:

GATCTGAAAT AACATTAATT TGATTGTAAC CCTATTGGGG TTAGTCCCA CCCTTTGTTC 60
 CATCTTGAGC AGAGATGNGC TGCATTTCTT AACGTTTGGT CTCTATACAT TATACCATCT 120
 35 GCTGAAGTTT AGCTTTGTGT GTGTGTATAT GTACCCATGT GTGCACTTTA AATATCAGTA 180
 CAAACTGATA AACAATGTTT CTGGTTAATG TTGCAAAAAT GGAACACTGT ATTNACATA 240
 ATTGATTTTC TACTCCTGCC CTGTGAATTA AGGCAGAGTT TTACTGTAN 289

40 SEQ ID NO:2891

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03433

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SEQUENCE DESCRIPTION:

GATCTTCCCA CACCAGCCTC CAAAATACT GGGATTACAG GCTTGAGCCT CCATGCCTGG 60
 CCCAGGTAAC ATGTTTATTG AGCTGTACAT GCATATGAGA AATAAGAAAC TTTTTTTTCC 120
 TACTATCATC TCTTAAATNT NGTNTTCTTT TTCTTTTGCT TCCTCTTCTT CTNTNCTATT 180
 50 TNTNATAAT ATCATGCACA ACTATAACCT ATGGGAATNA TGTAGTAACA CAGATTATTC 240
 ATCTTGTTAG AGTTGTATTA AAAATAAACA AGCATTTCAA ATTAAA 286

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SEQ ID NO:2892

SEQUENCE LENGTH:286

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03434

SEQUENCE DESCRIPTION:

GATCCAAGAC CAGGGTGGTT GGGGGCTGCC CCTGGCCGAG TCACTGAAGC GACTNATGTC 60
 CCTGTNTCCA GGACGANCTC CTCCTCTACT TTGGGACGCC CACGTGGCAG ACCGTGACCA 120
 TCTTTGTGGC GGNAGTGCTC ACCGCCTCAC TCACCATCTG GAAGAAGATG GGCTGAGGCC 180
 CCCAGCTGCC TTGGACTGTG TTTTCTCTCG GGTAANNNGN GGCATTNTTC TGGGAGGGGT 240
 GGGGATTGGG GGACATGGGC ATTTTCTTA CTTTGTAAT TATTGN 286

SEQ ID NO:2893

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03435

SEQUENCE DESCRIPTION:

GATCTGCNNG GGCNTGTNCA GCTGCAGCAT TCCTGAAAGA TTTCGTAAC CATCCTAAGT 60
 GGGCACATTT AGACATAGCA GGCCTGATGA CCAACAAAGA TGAAGTTCCC TATCTACGGA 120
 AAGGCATGAC TGGGAGGCC ACAAGGNCTC TCATTGAGTT CTTACTTCGT TTCAGTCAAG 180
 ACAATGCTTA GTTCAGATAC TCAAAAATGT CTTCACTCTG TCTTAAATG GACAGTTGAA 240
 CTTAAAAGGT TTTTGAATAA ATGGATGAAA ATCTTTTAAC GGAAA 285

SEQ ID NO:2894

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03436

SEQUENCE DESCRIPTION:

GATCAGCTCT TTCTATTTT ACTCGTAAAA ATTATGGAAA TAAATAATTT TGCTAACAAC 60
 TTTGAAATTT CAAACTTCTG GAAAANATGA AAATATTCAT TGTTCAATAT GAATTTAAAT 120
 TGTAAGGTAT GAATGTNATT TGTCTGTACA TCTTGATCT TTTCCAAAA ATGATTCTGT 180
 ATCTTTTGA AAAAAGCCGA GAGTTGAAGA TAGTATATTT CTGGTAGTAC TGAATATTTA 240
 CTTACAGTTT CTATCAAAAA TATATATTG TTTCTAAAAT TAAA 284

SEQ ID NO:2895

SEQUENCE LENGTH:283

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03437

SEQUENCE DESCRIPTION:

GATCTCCTTG TTAGTGGTGG TAGGGAGCTA GACAAGGATG GCAACTATTT CTGTATCTTA 60
 CATACCTTN ATTTNGAGGC CCTGTCAATG TTTTATATAA TANNCATTT TTGAAAAGGC 120

EP 0 679 716 A1

AACTCTTAAA ACTAAAACAA ACTTAACAGT CTGTCAAGTT GGTGATATAA CCCCACAGAA 180
GACTTACTTC AAGTGACTTG AAAACTTAGT ATTTTGTCTG TNCTTTGCTA ATGGGNATAN 240
ATCCTACAGA CCAAACANCC NCAGNTAANT CTTAANCTGC AAA 283

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SEQ ID NO:2896
SEQUENCE LENGTH:279
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03438

SEQUENCE DESCRIPTION:

15

GATCCCGGGA GACCTGGGGC TGCCGAAGAA GCTCTGCTCC AAATGGAGAG TGTAGCCTGA 60
GGGCTGGTGT TGCCTGCCTC CCCTGTNCTT GTNCCTTGTC CAAAAATAAA TCCTTTCAGA 120
ATGTAGCACT CACGNCCTAA TAAGGAGCGA ATCCTACATC CACCAAGGCG GGCCTCTGG 180
CCCTCCCTTC CTTAAGCCCA GTCCTGTGTC CTCTGAAAGA GGTTCAGTC ACTCACACCN 240
GCTTGCGCTC ACCATCAATA AAAGTAATT CACCNGAAA 279

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SEQ ID NO:2897
SEQUENCE LENGTH:278
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

25

CLONE:HUMGS03439

SEQUENCE DESCRIPTION:

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GATCCCTCC CCAAGATAC TCTTTGTGGG GAAGAGGGGC TGGGGCATGG CAGNCTGGGT 60
GACCGACTAC CCCAGTCCCA GGAAGGTGG GGCCTNCCC CTAGGATGCT GCAGCAGAGT 120
GAGCAAGGGG GCCCGAATCG ACCATAAAGG GTGTAGGGGC CACNNNCTC CCCCTGTNCT 180
GTTGGGGAGG GGTAGCCATG ATTTGTCCCA GCCTGGGGCT CCCTCTCTGG TTTCCTATT 240
GCAGTTACTT GAATAAAAAA AATATCCTTT TCTGGAAA 278

35

SEQ ID NO:2898
SEQUENCE LENGTH:276
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

CLONE:HUMGS03440

SEQUENCE DESCRIPTION:

40

GATCTGCTTA CCAAGCATAT TAGGAAATAC CTCTTAGGAA GCATTAGCGG TCTCAGGCCA 60
ATTACTGTGG AGCAGCTTTC ATTCCTACCC ACTTGCAAAC CTGGCGCTG TTGTCTGAGA 120
TTGCTGCAGC CATTCTTGTT ACCATGGTAC TTCTCAAAC TTGTGAAAAC CTGCACTTTT 180
CCTTGATGA CAGGTTCTCTG TCTTGTCTGT CATGGGAGCC ATTCTGCCAA TTAAATGCG 240
ACTGTGGTAT AAACAGTAAA ATGATTTAAA AGTAAA 276

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SEQ ID NO:2899
SEQUENCE LENGTH:274
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

50

CLONE:HUMGS03441

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SEQUENCE DESCRIPTION:

GATCAGTGTT ATATTTTACT GGAGAAGCTA TTGAAGATGA TGATGATGAT TATAATGAAG 60
 AAGGTGAAGA AGCGGATGAG GTAATGTTTA CCAAATAAGC AAATAATTCT NTGTGGTTAA 120
 CACATTGAGA AGCAAATTGA ATNACTTATG TATTCCTTTG CTATAATCAT TCTGTGATTT 180
 GGGATAAAAA CATTTTGGAA AACATGATTT TAGAATTCTA CAGCCAAACA ATGTATGTAT 240
 AAGGTTTCAA TAAATAANTT GCAAAACTCA GAAA 274

SEQ ID NO:2900

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03442

SEQUENCE DESCRIPTION:

GATCCCCACC TGCCATCCTA TAGTGTGTG TTCCTGTGTG TTCCGGGGCT TCTGGGCAGC 60
 TGGGCCTGCC CGGGGAAGTC CTTGCAGGTG GGAGGCCATA CAGAGACCCA CTGTGTGCCA 120
 CTGAGCGTCC CACTGTGCT GGGCAACTGG AGGACTGCAG GGGGCGCCAG GTGACTCTCT 180
 CCTTTTATAT CACAGCAGCT CCTGTGCTGA CCTTCAAGTT ACGTTTTGGA ACTGTAATAC 240
 TAAAGGAAGA AATAAACTAC TAATTTGTAT AAA 273

SEQ ID NO:2901

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03443

SEQUENCE DESCRIPTION:

GATCTGGTTA AGTTGTGTAG TAAAGCATTG GGAGGGTCAT TCTTGTCACA AAAGTGCCAC 60
 TAAACAGCC TNCGGAGAAT NNNTGACTTG CTTTCTAAA TCTNAGGTTT ATCTGGGCTC 120
 TATCATATAG ACAGGCTTCT NATAGTTTGC AACTGTAAGC AGAAACCTAC ATATAGTTAA 180
 AATCCTGGTC TTTCTTGTA AACAGNTTTT AAATGTCTGA TATAAACAT GCCACAGGCG 240
 AATTCGGGGA TTTNAGTTTC TCTGAATAGC ATATATNTGA TGCATCGGAT AGGTCATTAT 300
 GATTTTNNNC CATTTGGGCT TCATAATGNA AACCAGTTCA TTTTACCTAT CAGGTTATN 359

SEQ ID NO:2902

SEQUENCE LENGTH:268

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03444

SEQUENCE DESCRIPTION:

GATCAGAGCA CAGTTGAAAT TCATGGAAC TGCATTATTT AAGCAACCAG AATTCCACAC 60
 TGTAGGAAGG TTTTGAAAAT TGTTTCGTTA TAGATTTTAT CTTATCTTTT GGTGTTGTCT 120
 TGGTTTTTCT CATAGACTTT ATAAGTTTGA ACTGGACTTA TTTGATTATA ACCACAAATT 180
 GTGTGTGTGT GTGTGTGTGT ATATATAGAA GTCATTATGG CAGATGCACA AATTGTGCAG 240
 TGATGTAAAT ATACATACTT CACAGAAA 268

SEQ ID NO:2903

SEQUENCE LENGTH:264

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03445

SEQUENCE DESCRIPTION:

GATCGGTAGT GTTGTGTGTA GGCCATTCTT CTGGAGAGCC ACAAGCAGGA AGAGCAGCGC 60
 TGTGTTGCAG AATGGAGTTC CATGGATTTC TACCAGACCA CTGAAGGAGT TCCTNGAAGC 120
 CCTGCCGGTAG CTAGCACTGA AGACTATTTT NCTATTGGTA TAACCGGCC ACCTGAAGGG 180
 GAAAGGGGAA ATCAANTTAA TTTTCTCGTT AGACATANGG AAATTTAAGG AAAAACAGNT 240
 TTAGGANCAG TTAATCAGCG TAGN 264

SEQ ID NO:2904

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03446

SEQUENCE DESCRIPTION:

GATCCATAGT GAAATTGCCA GAGTTTTGCC TGCTGCTTTC CTCGTGGCCT CTTCTTGGGT 60
 AGTGAAATNA AGTGACATTT GGATTTTAAT TTGGGTGGGA GGGCTGGGAC AGTTTTNTT 120
 CTAGAAATGT CTGTTGAGAT TTCCCCCTTT AGTTTCCAAC CTTCTCCCCA ACCCTTGGAG 180
 CTAAATGCGT TGTAATAATAT TGCCAAAATG AAAAGTGTTT TGTAATACTG CAATAAAGGC 240
 TGCTTGTTTT TGTGAAA 258

SEQ ID NO:2905

SEQUENCE LENGTH:264

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03447

SEQUENCE DESCRIPTION:

GATCGGACAT GAAAGNACCC TGNGAGTCGA TTGTCCTANC TCCAGCGGCC CTGTCATCCA 60
 GCTCACTCAT CAATGGGGCC AGTCAGGCC AGGCACTGGG CTCCGGAGGA CTCACCACTG 120
 CCCCCTGCTG CCATGTGGAC TGGTGCAAGT TGAGGACTTC TTGCTGGTCT AGTCACGCAT 180
 GCAGTGTTGG GGGATGCCTT GGTTTTACT GCTCTGAGAA TTGGTTGAGA TACTTTTACT 240
 AATNAACTG TGTAGGTTGG GAAA 264

SEQ ID NO:2906

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03448

SEQUENCE DESCRIPTION:

GATCTGCTTT CAACACTTTT AGCTCTTCTA GAATTCAGA AAAATGGTAT CGGATGTACA 60
 GCATGGACCC TTCTNTGGTG GGCTTCTTTA CTGTAATGCT TTTAANATTC ATCTGTGCTG 120
 TTNAGTGTCT CTGCAGTCCA TTCCTTCTGT TGAGTGTATC AGTAGTCCAT TCCTTTTCAT 180
 GGCTGAGTAG TATTTCAATTG TATAATTATA CCACTATTTG TNCATTACT AGATAATANN 240

CAGTTGGCTT GTTAAA

257

SEQ ID NO:2907

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03449

SEQUENCE DESCRIPTION:

GATCCATCCG CCTTGGCCTC CCAAAGTGCT GAGATGACAG GCATGAGCCA CTGCACCCGG 60
 CCATATAATC AAATTTTAT TGATTTTAGA GCAAAGGACT TTTCAATGT AACTGCTTAG 120
 AAATCGAGCA ATTTTCTATT GTATAGAGTG AAAGTCAAAC TTGTTTATTG TACAAGTCTT 180
 TAAAGGGATA GTTAGGAGTA AGTTGTATTT GCTGAATATA TAGACCTCAT TTGTAGCCAT 240
 TAGTGATTCT GTATTN 256

SEQ ID NO:2908

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03450

SEQUENCE DESCRIPTION:

GATCTAATTA AAAAAAGGC AATATTTTAT TATTAAAGTA CTATACTAGG AGAGAATGTT 60
 TCANAACCTC CTGATGAATT TCTAAGTGAG CAACTTGATA TAAAATTGTA ATCTTCATTT 120
 TTGTCAGTGT ATCCAGTTAC AGAATGCTAC ACACTTACCT TTTTATTGGC TGAGAAATCT 180
 GGTTATTTCA TCTTAATCTC AAGATTGTTT TCAAGTGTTT TATAATTAAA TCATAATAGC 240
 ATATTTTAAA ATCAAA 256

SEQ ID NO:2909

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03451

SEQUENCE DESCRIPTION:

GATCAAACCA GCTCTTNTNA CCCAAACCAN TGCCGCTGCA TTAAAGGGAG GCCCAGCTAC 60
 TCCTTCCCAG CTGAGATGTG GGTACAGGTC AGATTNTCA GGGAGATGGC ACTAACACGA 120
 CACAAGCTCA CTCCCAGAAC CGCAGCTGAT GTTTATAATA ATCGTATGTA CTGTGCAATT 180
 TAGGAGGGGA AAAAAAGGCT GTACAAGCTT TAACTCTAAA NNAAATNTCT ATTTTTTNCC 240
 TCTTGCAAAN TTAAG 255

SEQ ID NO:2910

SEQUENCE LENGTH:254

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03452

SEQUENCE DESCRIPTION:

GATCTGCCCT GTACAGCCAT GTAGGCTGTG CGCTGCATAA CTCCAGGGAC ATGAGTCACA 60

EP 0 679 716 A1

5 CAGACACAAT GTGAGTGTGC TCCCCCGTCA TGCAACATCT GGACACAAC AACAGAGCAT 120
GGTGAATACA TGCTGAATTG CATTAGTAT GGCTGTGAAC TAGGCCTGGG GACAAGANTG 180
ANTTTACAT GGAAAGAATT TCCTGTAGCA GGAACAGAGG GGATAACAAC AGCAGTAAAT 240
AATAATAAGN CAAA 254

10 SEQ ID NO:2911
SEQUENCE LENGTH:253
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03453
SEQUENCE DESCRIPTION:
15 GATCCCCAC TAGTNCCTC CCTCTNCCC TGTAATCCTG GTCTAATAAC CCCCCACACA 60
TACACCTCTG GTGACCTATT TGCACAGACC GTNGTCTTCC CTCCAGTNTT CTNAGGGATA 120
GGGGACATTC CATCCCAAGC TTCTNCCTTA CCCACACCTA TCCTTTTNAAG GGGCTTTGGG 180
GTGGGGCTGG GGCAAGCAGA GGGACTGGGT CTTCACTTCT NGGGCTAATA AAATTGTTTC 240
TTTGTGGACT AAA 253

20 SEQ ID NO:2912
SEQUENCE LENGTH:253
SEQUENCE TYPE:nucleic acid
25 TOPOLOGY:linear
CLONE:HUMGS03454
SEQUENCE DESCRIPTION:
GATCAAACCG GTTCTNTCCT TTCTTGTGTT GCCATGTTAC TATGCCTCAA GCCCAGTTTN 60
CTTTTNCCTG AGCGATGGGG CCAGTCTCAT TCCTCCCCAG GAGTGAACT NGCTTCANCT 120
30 GAAAAGGTTG GGTGCATTGT CAGTAAAAAG GGCTTATTTG TTTCATTNA CTTTCCTGCA 180
AAATTTTCTT CAAAGCAACA AGTCCTAGGN GCACACAAAG CAACCCAAAG GCTTTTCCTT 240
GAAAAGCTC TTN 253

35 SEQ ID NO:2913
SEQUENCE LENGTH:254
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
40 CLONE:HUMGS03455
SEQUENCE DESCRIPTION:
GATCCGGGGC ATGCAGAAGC TGAGCACACC CCAGAAGAAG TNAGGGTCCC CGACCCAGGA 60
GAACGGTGGC TCCCACAGGA CAATCGCTGC CCCCCAACCT CGTAGCAACA GCAATACCGG 120
GGGACCTGG CGGCCAGGCC TGGTGCCATG AGCAGGGCTC CTCGTGCCCC TGGCCCAGGG 180
45 GTCTCTTCCC CTGCCCCNTC AGTTTTCNAC TTTTGGGGTT TTTTATTGNT ATTAACTGA 240
TGGGNCCTTN TAAA 254

50 SEQ ID NO:2914
SEQUENCE LENGTH:249
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

55

EP 0 679 716 A1

CLONE:HUMGS03456

SEQUENCE DESCRIPTION:

5 GATCCTTGTT TTGTTGTCAT GGAACTTCG GGGCTGGTGG GACTTAGGCC AAAAGCTCAG 60
AGGCACAGCC AAAATTTAGA AGCTTGCTAC TCCTACGACT CGGCCTATAA GGAAGAGAGA 120
AGCTGTCTGT ACTTTGGGGA CTACATTGCT GAAGGAAAAA AATCACTCCC TGGCTAATTA 180
AGATTGCTTC CAAATTGGGG GAATGTGTGT CATTTCCTTT ACCAAGGCCA GTCATCCCTG 240
CTTCCACCN 249

10

SEQ ID NO:2915

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS03457

SEQUENCE DESCRIPTION:

20 GATCCAGGCC GGGCCTATAC AGAGGTGCTG GCTGCTTGTT TACATTCTCC TCTGGGGCTC 60
TACCTCTCCA CACTTCCCCA GAAGGGAAAA GGGCACCTCG GATTACTNNN TTGGAAATNA 120
CTCCTTGGTG GGCAGCATCC TGAGGGTTCC CCAGAACCAG GCCTCTGCTC TGGCCCTCTT 180
GCATCTGGAA CGCCAGGTGG GTTTTNTGG CATAGGAGCC CACTTGCATT TTCATAGTTT 240
TATTGATN 249

25

SEQ ID NO:2916

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03458

30

SEQUENCE DESCRIPTION:

35 GATCACAGCC TCCAGGGCCC CCCAAATCCC AGGGAAGGAC TTGGAGAGAA TCATGCTGTT 60
GCATTTAGAA CTNCTNCTT TGCACAGGAA AGAGTCACAC AATTAATCAA CATGTATATN 120
TCCNCTATAC ATAGAGCTCT ATTNCNCTNC GGTTTTATAA AAGCCTTGGG TTCCAACCAG 180
GCAGTAGATG TNCTTCTGAN CCGCAAGGNG CAAACACTGA AATAAAATAG TTTATTTTNC 240
ACACTCAA 249

40

SEQ ID NO:2917

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03459

45

SEQUENCE DESCRIPTION:

50 GATCTCCTTT TGTGAAAACC AGTTTGATGT GCTAAAAGTA AAAAGTCTAN TTTCCAGTGT 60
GGTCTTGTTT AGAAGCAGCC AGATTTCCAA TGTTGTTTTT CCCCTCCACT CAGAAACCCC 120
TGCCCTTTCC CTTGAGAAAA CGATGGCAGG CATTCTCTG AGTTTACAAG CAGAGACTCA 180
CTCCAACCCA AACTAGCTGG GAGTTCAGAA CCCATGGTTG GAATAAAGAA ATTGTGCGTC 240
TTGGTCAA 249

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SEQ ID NO:2918

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03460

SEQUENCE DESCRIPTION:

GATCTATCCC TGCGGNCTCC ACACCTGAAC TTGCCTAACT AACTGGCAGG GGAGACAGGA 60
 GCCTAGCGGA NCCAGCCTGG GAGCCCAGAG GGTGGCAAGA ACAGTGGGCG TTGGGAGCCT 120
 AGCTCCTGCC ACATGGAGNC CCCTCTGCCG GTCGGGCAGC CAGCAGAGGG GGAGTAGCCA 180
 AGCTNCTTAA TCCTNAGCCT NCCCCTGTGT ATTCACCACC AATAAATCAG ACCATGAAAA 240
 CAAA 245

SEQ ID NO:2919

SEQUENCE LENGTH:384

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03461

SEQUENCE DESCRIPTION:

GATCAGGAAA CCAGAAATAC CACATTTATG GACCATGAAN GGTGGTTCT TGACTCTGAA 60
 GGGACTTTTG AGTAATCAG CGTAAGGGGA TTTCTAAAGC AGGCAATCCC TGAGCCGCA 120
 GAGAATAAAC GCCTTCCCAA AATGGNAACT NCCCACAGCC ACATTCAGA CCTGCTGAGA 180
 CTGCTGAGTG AGGAATGGCA GTGAGGTTTC TTCAATNAGT CTCAGTTCTC TTAATTTTCA 240
 GGAAGAAAGG GTAATTGCAG CCCCTCAGCC CCCAGGATTG ACCTCTNGGG AGNCATGGTA 300
 GCGTTGTGTG CCAGGCCGTN GGTTCAGGTG TTNGCAGAAG CTTTCAGATT CGTCCGAAGG 360
 GAAATAAAGT GTGTTGGCGT TAAA 384

SEQ ID NO:2920

SEQUENCE LENGTH:240

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03462

SEQUENCE DESCRIPTION:

GATCCCAGCA GCCCTCCCTT CACCGTGACC CCTGACCTTT GTTAGGAAGG TGCAGTTTTT 60
 NTTCTCAATC TAAATNCCTT TNAGGTGGGC CGCTTCCTTG GCTACCTGGT TCCAGGGGGC 120
 TGTTTTGTAA TNAGATGCTG CTGGCAGGCC ACTCAGAGGC TCCCAGCTGG GTTGGTGGGA 180
 CAGCCAGGCC AGATGACCTG ATTCCAGCAA AAATAAACT CAGATTTGGG CAAAATGAAA 240

SEQ ID NO:2921

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03463

SEQUENCE DESCRIPTION:

GATCCCTAGC AGCTCATCCT GCCCTTTGAA TACCCTCACT TTCCAGGCCT GGCTCAGAAT 60
 CTAACCTATT TATTGACTGT CCGAGGGCC TTGAAAACAG GCCGAACCTG GAGGGCCTGG 120
 ATTTNTTTTT GGGCTGGAAT GCTGCCCTGA GGGTGGGGCT GGCTCTTACT CAGGAACTG 180

CTGTGCCCCA CCCATGGACA GGCCAGCTG GGGCCACAT GGTGACACAG ACTCACTN 238

SEQ ID NO:2922

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03464

SEQUENCE DESCRIPTION:

GATCACCGGT TTCCGACTGA GTCTGGGGAT TTTGGCCTTG TTGACCCTCC TAGGTGCCCT 60
GGGAATTGCA AACAGCTTTC TGGATGAATA TCTGGACCTC AATATTGCCA AGAAACTGAG 120
GCGGCAATTC TAACTTTTTC TCTCCCTTT AATGCTTGCA GAAGCTGTTT CCACCATGAA 180
GGTAATATGG TATCATTTGT TAAATAAAAA TAAAGTCTTT ATTCTGTTTT TCTTGAAA 238

SEQ ID NO:2923

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03465

SEQUENCE DESCRIPTION:

GATCTACTGT GTGGTGTCTG GGCAGATGAA AGTACACTGC TTAGNGTGAT GCTTAGCATG 60
GGGCAGATGC TTGGTAAATT GTAATCACTT TTGTTGTCAG TTAATGGAT ATTTCACTGT 120
TGCCCTCTNAA ACGCTTACGG TAATATATAC TAATTATACA TGTATTATC AGTTTATATT 180
TATTGAACAT TTCGGGGAAG TAATTATAAA ATAATCTTGT CTACTGTCTT ACCCCAAA 238

SEQ ID NO:2924

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03466

SEQUENCE DESCRIPTION:

GATCTATGGT GCAGACTGCC TTCGTCGGGT GCAGACTGAG CGACCGNAGC CCCAGACACT 60
ACAGCTGGAT TNCTTGATGA AAATCTTGCC AAATTACCAC CACCTAAAGA AGACTATGNA 120
AGGAAGCTCA ACTCCAGTAA AGAACTAAGA ACAGTGTATA ACATGAAGAT AACATTTTGT 180
CTTTGACCAC TGTCCTTTGA ATGGGCCAC AGTGTTTATG TACTCTTAAC AACTCACAGA 240
ATAATACATG TTCACCTTAT TTTGTAAAAT TGGGTTGAGA GGAACTAAT GGAGTTTCAT 300
TGTAAGTGT CTTTNTAATT TATATAAATG TATTATTNTC CTATAAA 347

SEQ ID NO:2925

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03467

SEQUENCE DESCRIPTION:

GATCCTGTGA TATGGTTTTN GGCCAGCAA ATCTAGGAGA AGATGCAATT AAAAACTTCA 60
GAGCAAAACA TCACTGTAAT TTTTGTCTGA GAAAGCTTAA ACTTCCAGGT AAAAAATTTT 120

TTAATCAGTA TAGTATATAA TTNGTTACGA AACTNGGTTA CTACAATACC TCATAAGGCC 180
AGAGGTACAA NTGTTTAATG TAATGGTCTC TAATTGTGCC AGCTTCAGCA GCTCTN 236

5 SEQ ID NO:2926
SEQUENCE LENGTH:271
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
10 CLONE:HUMGS03468

SEQUENCE DESCRIPTION:
GATCCCGCAT GCCTGAATTC ACTAAAGCCA AGGGTCTNTA AGCCACGCTN NNTCTTCTGA 60
GACTTCCATT CTTTCTGAT TGGCACACGT GCAGCTCATG ACAATCTGTA GGATAACAAT 120
CAGTGTGGAT TTCCACTCTT TTCAGTCCTT CATGTAAAAG ATTTAGACAC CACATACAAC 180
15 TGGTAAAGGA CGTTTTCTTG AGAGTTTTAA CTATATGTAA ACATTGTATA ATGATATGGA 240
ATAAAATGCA CATTGTAGGA CATTCTTCTAA A 271

SEQ ID NO:2927
SEQUENCE LENGTH:235
20 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03469

SEQUENCE DESCRIPTION:
25 GATCTAAAAAT GTTTATTCCT TCTGTAGTGT ATTAATCTCT GTGTGTTTTT TTTGGTTTTG 60
GAGGAGGGGT ATGAAGTATC TTTGACATGG TGCCTTAGGA ATGACTTGGG TTTAACAAGC 120
TGTCTACTGG ACAATCTTAT GTTCCAAGA GAACTAAAGC TGGAGAGACC TGACCCTTCT 180
CTCACTTCTA AATTAATGGT AAAATAAAAT GCCTCAGCTA TGTAGCAAAG GGAAA 235

30 SEQ ID NO:2928
SEQUENCE LENGTH:234
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
35 CLONE:HUMGS03470

SEQUENCE DESCRIPTION:
GATCCATCTN CCCTCATAAA AGTGTTTCAGG TACAGCAGCT GAGGCTGCCC TGAGGAATCA 60
NGGGGCCATT ACCAAGGGGC AGGTAAAGGG TATNTAAGAG GTGGCCTTCA TGGTAGAGCT 120
TGACCCAAGA NCTACTCCAC ATTCGGNTNG CCCAGACTGA CTCCATCCCC TGANTTTCCC 180
40 TTNGACTTCA CCCTGTTTGT AAATAAAACA NTAAATGGA AGGTGCTNTG GAAA 234

SEQ ID NO:2929
SEQUENCE LENGTH:233
45 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03471

SEQUENCE DESCRIPTION:
GATCTCAAAT CCTGGAACCC CGATTTCAT CTACGTTCTA GTCAGTGGCC TCAAAGGACC 60
50 CCACAGCACC TGGGCCAGAC CAACAGCTCG AGGGAGAACC TGAAGGCCCA GGGGGTCCAG 120

55

GGCGGACCTG GGGCCCCGAC CACCAAGGAC AGCTCAGGAC TGCCCCTTNA CTGCATGTCC 180
 CCAAACCTNAG CATGACTCCT GTCCTCTTCA ATAAAGACGT TTCTATGGCC AAA 233

5 SEQ ID NO:2930

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10 CLONE:HUMGS03472

SEQUENCE DESCRIPTION:

GATCAGCAGA AAGCACAAAC ACAACTGCTT CTGTATTCAG GAGGTTGTGA GTGGGCTGCG 60

GCANCCGTTG GTGCCCTGCA TAGTGGGGAT GGCTCGCAAC GTCTCTTCAT TCTGGAAAAA 120

GAAGGTTATG TGAAGATACT TACCCCTGAA GGAGAAATTT TCAAGGAGCC TTATTGGAC 180

15 ATTCACAAAC TTGTTCAAAG TGAATAAAG GTTGGCTTTT TAAATTTTAA A 231

SEQ ID NO:2931

SEQUENCE LENGTH:231

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03473

SEQUENCE DESCRIPTION:

GATCAGCAAA AATAAAGGGG CTACAGAAAC ACTCATTTTT ATGCTGTTCC CTCTTGGGCT 60

25 TCATGCAAAG ACAATTCTNT GTAAATNTAC AGTTGACTCT GATTGGGAAA TATGAAAATC 120

AGTCCATCCT TGTATAAAA AATTTTTTTA CAATTGTAAT TATATTGATG TTCATATTGT 180

GTAAAATAAC TCATTTAATA AAATAGTACT TTGATTACG ACATCAATAA A 231

30 SEQ ID NO:2932

SEQUENCE LENGTH:230

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03474

35 SEQUENCE DESCRIPTION:

GATCCCACCC CCAGCCATTT GCATTGCTGG CCCAGCGCCT GGCCTGGGGG GCGGGGAGAG 60

GCAGCAGAAG GGGCTGGGCA GGGGCGGTGG AGGACTCAGG AACTNCCCGG GGAGAGTGGG 120

TATGGCGGCT GAGCCAGGGN CCCTCCTGTN TTNACTTCC CGGGATGGGT CCTTGCTTNN 180

40 AAGCTGTNTC CGACCCACCC ATNTAATAAA ACCCAAAGGA ACAGCCCAAA 230

SEQ ID NO:2933

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03476

SEQUENCE DESCRIPTION:

GATCAGCCGG AAACCCCTGG CAGCCAAGAA CAGATAAGGA AGGGATTGGC ATCGGCTGGC 60

50 CTTCCAGCAC CTCTCTCTC CAACACTTCA TTCTCTCTTG CCCTGTNTCT CAAATAAACC 120

CAATGCTGCG TGTGAGGCCT TTTTATTTT TCTTTTCACT CTCTTTCTAA TGCTTCCCAC 180

55

CTTACCTTTT AGATTCTTTT GCTAGGTGGG AGATTGTTAT AAGGTCTTTA AACCATTTCC 240
 ATTTGTTTCT TTAACATTAC CAAAAGCAGG GNACAAAGCT CTTATTCAAC TGCGNATTCC 300
 ATAGNGGGCT CTGGNTTNTT CTTGAATN 328

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SEQ ID NO:2934
 SEQUENCE LENGTH:220
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

10

CLONE:HUMGS03477

SEQUENCE DESCRIPTION:

15

GATCTTGCCC GGTGTCCTGG TCCTCTTGCT TCCGTCGCGG CCGCATGTGC GTGTGTCCAA 60
 GCAGGTCCTG GGGGCTCAA CTGCTGCCCC TGGTTGAATG TTCTCTTGAT AGTGCTGGAC 120
 CCTTTGTCTA TTNAAAGCG AATTTTGTGT GATTTCCTGC CCTTTGCGTT ATATTGTATA 180
 ATACCAACGT AAGGAAATAA ACCTTTGGAA TTGTTGGAAA 220

20

SEQ ID NO:2935
 SEQUENCE LENGTH:219
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

25

CLONE:HUMGS03478

SEQUENCE DESCRIPTION:

GATCCGAGGG CGATGGGACA GTGCACCGCA GATAGAAGAG GAGGACGTGC AGCATGGTGG 60
 GAAACGGGGA CACCACCTCC CAGGACGACT GTTTCAGCAA AGAGCGCANT GCTCCAGGTG 120
 ACCCAGCAAG GCTGTTGTNT GTATGGAAGG ACACGCTCGC GGCAAGGGCA GGGCCTGGGN 180
 AGGGTGGCCT GTCCAGTCCT NNAGACAAGG GGAGGCCTN 219

30

SEQ ID NO:2936
 SEQUENCE LENGTH:218
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

35

CLONE:HUMGS03479

SEQUENCE DESCRIPTION:

40

GATCACCTGA GGTCAGGAGT TCGAGACCAG TCTGGCCAAC ATGGTGAGAC CCCATCTCTA 60
 CTAAGACTAC AAAATTAACC AGGTGTGGTG ATGCATGCCT TTNACTCGGG AGGCTGAAGC 120
 AGAAGAATCG CTTAACTCG GGAGGCGGAG GTTGCAGTGA GTCCAGATTG TGCCATTGCA 180
 TTCCAGCCTG GACAAGAGGA GCAACACTCT GTCTCAA 218

45

SEQ ID NO:2937
 SEQUENCE LENGTH:218
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

50

CLONE:HUMGS03480

SEQUENCE DESCRIPTION:

GATCATGCCT GCGTGACAAA GCCTCCAGAA AAATCCTTGA AAGACAGGAC ATGGAGAGCT 60
 GCTGGGTTGG CGAACACATC CATGTGCCGG GAGGATGGTG CACCCCAACT CCACAAGGAC 120

55

CCTTCCAGAC CTCACCCTGT GTATNTCTTC ATCNNNTGT TCATTGTAT CCTTTAAAT 180
ATCCCCTGTA ATAAATCAGC AATAGTAAGT AACTAAA 218

5 SEQ ID NO:2938
SEQUENCE LENGTH:218
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
10 CLONE:HUMGS03481
SEQUENCE DESCRIPTION:
GATCTAAACA GTGAATAGTA CATGCAAAGG CATAGTCTAG AGGATAAAAG TGAAAATAAT 60
TAGTAGCAAA ATNAATGCCT TGTGGATGAG GTTTAGGGGC CAATAACTAT CTTGAGGTAA 120
GGCCAGGTTG TGGCTGCCTT TGTGTTGTAC TAAGGGGTTT GGACCTTCCT AGGAGATTAG 180
15 AGCTTNATTA AAGTCACAAC ATCCATAAGN GAAATAAA 218

SEQ ID NO:2939
SEQUENCE LENGTH:218
SEQUENCE TYPE:nucleic acid
20 TOPOLOGY:linear
CLONE:HUMGS03482
SEQUENCE DESCRIPTION:
GATCCCTTTG CTGTGAGGGT AGAAAACCTC ACCAACTGCA CCAGTGAGGA AGAAGACTGC 60
25 GTGGATTCAT GGGGAGCCTC ACAGCAGCCA CGCAGCAGGC TCTGGGTGGG GCTGCCGTTA 120
AGGACGTTCT TTCCTTACTG GTGCTGATAA CAACAGGGAA CCGTGCAGTG TGCATTTTAA 180
GACCTGGCCT GGAATAAATA CGTTTTGTCT TTCCCAA 218

30 SEQ ID NO:2940
SEQUENCE LENGTH:216
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03483
35 SEQUENCE DESCRIPTION:
GATCTTAGAT TTGATGAAGC ACAGTATGCA GGTAGGCCTA ATGGGGGAAG ATGGTAATAT 60
AAAAGCAAGA AGTATTTTTT TTTTGNAATG NCTGAAAGCT GTTCTGTGGA TGACCTACCG 120
NTTCTTTTAA ACACGATTCT CTCATTCCA ACTCCAACT TGCTCAACTA ATCCTTAAA 180
40 ATAACTTGA GCTGGAATTT GAGGCTTGCC TGGAAA 216

SEQ ID NO:2941
SEQUENCE LENGTH:213
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS03484
SEQUENCE DESCRIPTION:
GATCTCGGGG GTGTGGGGCC CTGTGCCTTC CTGAAGTGCT GGCAGCCCAG TGGCACCTCC 60
TTCAGGCCTT TGGGGTATTC CCCTAGTGTG CCCAAGTNAG CCTCATATTC TGGGCGGACA 120
50 GCTTGTCTGG ACTTCGAGT TGGGGGTGGT CAGACACCAC AGGAGCTGTC ACCTCCTGCG 180

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GATGGGCAAA TAAATTNGTG GAGGACNCCG AAA

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SEQ ID NO:2942

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03485

SEQUENCE DESCRIPTION:

GATCCTCTCC CCTAGTATNT TCAGCACATG CTCACTGTTC TCCCCATCCT TGTCCCTCCC 60
 ATGTTTATTA ATTCATATTG CCCCAGCGCCT AGTCCCATTT TCACTTCCTT TGACGCTCCT 120
 AGTAGTTTGG TTAAGTCTTA CCCTGTAATT TTNGCTTTTA ATTTTGATAC CTCTTTATGA 180
 CTTACAATA AAAAGGATGT ATGGTTTNA AA 212

SEQ ID NO:2943

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03486

SEQUENCE DESCRIPTION:

GATCTTTTCA GAGTGGTGTT TCTAAAAGAG CATGTACAAA AGTGGCCTGT GGACATTAG 60
 GCCTAAAGTG ATGCATTNCA TCTTCTNNT TGTGCCAATG TATCAATGTA GAGTTGCTCT 120
 GTTTTCTNCA ACTGTATNNA TTGCTGCATT TCTCAGCATA AACTTATCCC ATTGTATTTT 180
 TNATAAATAA ATATTTTTTT TGAACTTTCA AA 212

SEQ ID NO:2944

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03487

SEQUENCE DESCRIPTION:

GATCAAGGAT GAGGATTAGC ATCTGCAAAT TGAACCTAT CTAATTNCA TTTTATTTT 60
 TTAGAATTGT AATTAAATTT GTGTAATAAA TGTNTTCCAT TTCATTGTA CACTTAAAC 120
 TTGGGTGACT GAAATGCAGT TAAGTGAATT NCCTTTTNT AAAAGCAAAT GTAGATTATN 180
 CAATAAAGCA GCAAACCAAT ATTAANCATA AA 212

SEQ ID NO:2945

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03488

SEQUENCE DESCRIPTION:

GATCTATGTA AAAGAATACA ATTCTTTTTT ACATAATTAG TGAAATTTTA TTTTTATTA 60
 GGAAACACTA AATAGTGTA TATTTCTTTT GCTTTTAAAA AAATTCCTGG TAGCAATCA 120
 AGATAAATAA TTGNTTCATT TTCTTGAGCA ATACTGAAGC AGGATGAAGT AAGAGGAATG 180
 CATTCAATTA AACATGCTTT GCTTGNTGAA A 211

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5 SEQ ID NO:2946
SEQUENCE LENGTH:209
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03489
SEQUENCE DESCRIPTION:
10 GATCAAAGAA CTTTCTTAT AACCTGCAAT CAGCTACTCA GCCAAAAAC AAAACAAAAC 60
CTTGACTGCC TATGGAGGAA GACTGTGTTC GGGGGAGCTG GCATAGCTAG TGCAGAGTTC 120
AGATTTTCTG CTGATAATCT TTTACACCTT GGGAAAACCT TAATATCCGT ACCTGAAGGN 180
TGATTCACCT AAAAATGTGT TAACTGAAA 209

15 SEQ ID NO:2947
SEQUENCE LENGTH:208
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03490
SEQUENCE DESCRIPTION:
20 GATCTTCTCT GTGAATCCAC CCCTGGCTAC CCCACCCCTG GCTACCCCAA CGGCATCCCA 60
AGGCCAGGTG GGGCCTCAGC TGAGGGAAGG TACGAGCTCC CTGCTGGAGC CTGGGACCCA 120
TGGCACAGGC CAGGCAGCCC GGAGGCTGGG TGGGGCCTCA GTGGGGGCTG CTGCCTGACC 180
CCCAGCACA TAAAAATGAA ACGTGAAA 208

25 SEQ ID NO:2948
SEQUENCE LENGTH:207
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
30 CLONE:HUMGS03491
SEQUENCE DESCRIPTION:
GATCACACTT NGGCCTTCAC TGCAGCGTGG TGTGGCCACC GTCCGTTTCC TCTCGGCCTT 60
CCTCCGAGTC CAGGTGGACT CTGTGGATGT TTGGATGTGG CCCGAGCAGG CTCAGGCGGC 120
35 CCCACTNACC NACAGCATCC GCCGCCACCC CTTGCGGTGT NAGCNCTCAA TAAAAACAAC 180
ACACTATAAA GTGTTTTTAA ATCCAAA 207

40 SEQ ID NO:2949
SEQUENCE LENGTH:203
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03492
SEQUENCE DESCRIPTION:
45 GATCTGAAAA TTCTTGGAAA TTGTTCCATG TGATTAACAT GGAAGTGCCT CTACTTAATC 60
ATTCTGAATN ATTAAATCGT TTCATTTTCT AAATGCNTTA TAATGTGTTT AGCCCTTTCT 120
TGTTGCTGTA TGTTTAGATG CTTTCCAATC TTTTGTTACT ACTAATAATG CTATAAAATA 180
AATATCCTTG TACTTCTTTG AAA 203

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5 SEQ ID NO:2950
SEQUENCE LENGTH:201
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03493
SEQUENCE DESCRIPTION:
10 GATCTTNTCT GTNTGGGTGG GGAGCCGGCC GGCCGTGACC CAACGGCATC CCAAGGCCAG 60
GTGGGCCCTC AGCTGAGGGA AGGTACGAGC TCCCTGCTGG AGCCTGGGAC CCATGGCACA 120
GGCCAGGCAG CCCGGAGGCT GGGTGGGGCC TCANTGGGGG CTGCTGCCTG ACCCCCAGCA 180
CAATAAAANT GAAACGTGAA A 201

15 SEQ ID NO:2951
SEQUENCE LENGTH:200
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03494
20 SEQUENCE DESCRIPTION:
GATCGTATAT GTGGGTCCCT TCCCTAGAAG AATGGTTGCT GATATGGCTA CTGCTTCTAC 60
ATCTNGAGTT TTTNAATTTA CTTTTTNAC ACTGTAGCAT TGAGACTGCT TGATTCAAGT 120
CTGGTGCTTT GCCAGATGTA TTAATTNCCA TAAATGCTTT GTGAGTTTGG TTAATAATGAA 180
25 GATTCACCTG GGAAANCAAA 200

30 SEQ ID NO:2952
SEQUENCE LENGTH:199
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03495
SEQUENCE DESCRIPTION:
35 GATCACAGCC GGAATGCAGC TGAAAGATTC CCTGGGGCCT GGTTCCAACC GCCCACTGTG 60
GACTCTAAGG CCTCTGCATT TGTGGGTGGT CTGNCTGTAA TATTTTGGTC ATNGGCTGGT 120
CTGGTCGGTT TCCCATTGTG NTGGCCAGTC TCTATGTGTC TTAATCCCTT GTCCTTCATT 180
AAAAGCAAAA CTAAAGAAA 199

40 SEQ ID NO:2953
SEQUENCE LENGTH:319
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03496
45 SEQUENCE DESCRIPTION:
GATCTCTAGT TTTTNTGGTT TAATTTTNAG TAGCAGGTCA AAAACCTGCC CTCCTGTNAC 60
TTATTCCCTG AGACTTTTCA GGAGAGCCAG CCCACAGATG ATGAAGAAAT GATGGAAGTT 120
CATTTGGAGA GTCAAATGGG AAAAAACAA AAAAAAACT GCCTTTAATA CAGGCAATTC 180
AGTGGACTAT AATAATAGTG GAGGGTTGAG ATGTAGAGTT TTTAAAAAGT GAACAGTTGC 240
50 TGTTCCTTACA TCTNTAANGA AAGCCATAAT GTCTTTAAAT CACTCTTCTG TAAATAGATG 300
NCCNTTTTGT CAGTGTAAG 319

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SEQ ID NO:2954

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03497

SEQUENCE DESCRIPTION:

GATCCTTAAT GCAGAGCTAG AGGACTTCTG GCAGGGAAGT GGGGAAGTGT TCCAGATAGC 60
AGGGCATGAA AACTTAGAGA GGTACAAGTG GCTGAAAATC GAGTTTTTCC TCTGCTTTA 120
AATTTTATAT GGGCTTTGTT ATCTTCCACT GGAAAAGTGT AATAGCATAC ATCAATGGTG 180
TGTAAAGCT AAA 193

SEQ ID NO:2955

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03498

SEQUENCE DESCRIPTION:

GATCTGTTTC ATTTATAAAA GGTCCAGTTT TTAGGACTAG TACATTCCTG TTATTTTCTG 60
GGTTTTATCA TTTGCTTAA AATAGGATAT AAAAGGGACA AAAAATAAGT AGACTGTTTT 120
TATGTGTGAA TTATATTCT ACTAAATGTT TTTGTATGAC TGTGTATAC TTGATAATAT 180
ATATATATAT ATN 193

SEQ ID NO:2956

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03499

SEQUENCE DESCRIPTION:

GATCCAAGAA TGTCCAAGA GTCCCGCCAG CCTCAGCCAG GTGGGCCTGT ATATAGGGTC 60
CATGTGCAAT AGGGAGGGAC GTCTTCTATT TTTNCTGCC CCTCCCCGC CCACTGCTGT 120
GGGCAGGGGG AGAAGGTATT TTCGAGATAA AGCACAGGCA CCACAAATAA AAGTCGTGAA 180
GTTGCCACTC AAA 193

SEQ ID NO:2957

SEQUENCE LENGTH:192

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03500

SEQUENCE DESCRIPTION:

GATCTGGGAG CAAGCTACCA ACAGGGGAGA CTCTTTECTG TATGGACAGC TGCTGTGGAA 60
ATACTGCCTG CTTCTCCAC CTNCTCANAG CCACAGGAAA GAGGAGGTGA CAGAGAGAGA 120
GCAAGGAAAG TAATGAGGTG GATTGATACT TTCTACTTTN CATTAATAAT ATTTTCTAGC 180
CTGCAGTCTA AA 192

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SEQ ID NO:2958
SEQUENCE LENGTH:190
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03501
SEQUENCE DESCRIPTION:
GATCAGCCTG GGCATCATGG TGGCCTGCAC CTGTAGTCCC AGCTACTCAG GAGGCTGAGG 60
TGGGAGGATA GTTTGACCCC AGAAAGTTGA GGCTGCAGTG AGCCATGAAT GCACCACTAC 120
ACGCCAGCCT GGATGACAGA GCGAAACCCCT GTCTCAAAGT AATTAATAAT AATTATATTA 180
ATTACAGCAA 190

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SEQ ID NO:2959
SEQUENCE LENGTH:190
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03502
SEQUENCE DESCRIPTION:
GATCTGCTTC CCACTGTGAC TGGGCTATGG GATTCTGACT ACCTTGCTTA CAGATTCATG 60
GTTTGATAAA TTTGTTGTAT TCAAAAACCTT GAAATGCAGG ACGCCATTAA GTGTCTGTTT 120
ATATTTNTGG AATATTTGTA TTAATTACAA TTAATTAATA AAAGTGGGTT TAAAAAACCT 180
TTCCAGGAAA 190

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SEQ ID NO:2960
SEQUENCE LENGTH:193
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03503
SEQUENCE DESCRIPTION:
GATCTTGCCC CTTTGACCT TCCCCAAAGG ATGGTCACAC ACCAGCACTT TATACACTTC 60
TGGCTCACAG GAAAGTGTCT GCAGTAGGGN ACCCAGAGTC CCAGGCCCTT GGAGTTGTTT 120
TCGGCAGGGG CCNTNTCTCT CACTGCATTT GGTCAGGGGG GCATGAATAA AGGCTACAGG 180
CTCCAACNTG AAA 193

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SEQ ID NO:2961
SEQUENCE LENGTH:185
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03504
SEQUENCE DESCRIPTION:
GATCAATCTG AAATATCTT AGCCCACTCA GGGAGCTCTG CTTCTAGAA AGGCATCTTT 60
CGCCAGTGGA TTCGCCTCAA GGTGAGGCC GCCATTGGAA GATGAAAAAT TGCACTCCCT 120
TGGTGTAGAC AAATANNAGT TCCCATGGT GTTGTGCCT ATAATAACA CTTTTCTTT 180
TTAAA 185

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SEQ ID NO:2962

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03505

SEQUENCE DESCRIPTION:

GATCCAACGA GGAATATTTT GCCACACGGC AAATATATAC CGTATAATTT TCTGTACCAC 60
 TTGATAGAAA GGTAAAGAAT GAATATTGTT TTTTAAATAA CTTTTTCTT ATATAAGTAA 120
 TATGTGCTTA TCGTGTAAC ACCTAAAAAC ATTGAAAAAT AAAAGGAAAA TAAAATTCAT 180
 ACATAACCAA A 191

SEQ ID NO:2963

SEQUENCE LENGTH:177

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03506

SEQUENCE DESCRIPTION:

GATCAGAAAT GGAGCATGGC CTTGTCCTTT AATGGGGATG CAAATAAAGT TTGTGGGGTT 60
 AAAAGTTATA AGACAGNAGT GATACCCAC TCTCTCCATT ATTGTCCAGC GGGGTGACAT 120
 AATGACAGGT TAAATATTG TGATTCATTG ATTAAATATT ATTTAAAGAA ATGTAAA 177

SEQ ID NO:2964

SEQUENCE LENGTH:176

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03507

SEQUENCE DESCRIPTION:

GATCACAGNG NTGGTGTC AAATCTATTNN AGGTTTGAAC TCTTGAGCTG GAACCTCAGC 60
 AAAGTATAGT ATATATTGTT CAGTATTCTT TTGGAACAT TTCATTAATG TACTTGCTT 120
 ACAGAAATTT CTGAACTTTA GTAAAAAAA ATAAAGTTAA ACTTTTAAAA CTCAAA 176

SEQ ID NO:2965

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03508

SEQUENCE DESCRIPTION:

GATCTGAACG ATGCCGTGTC CAGTTTGCGA AGTCCTATTC CCCTCCTCCT GTCGTGTGCC 60
 TTTGTTTCAAG TGGGGATGTA TTTCATGTAG AAGGTGGAAG AAGGCTGCTA TNACTCTTTG 120
 GATGGGAGTC TGGCAAGAGG AAATTGGAAG ATAAATATAA TAATAAGTGA AA 172

SEQ ID NO:2966

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03509

SEQUENCE DESCRIPTION:

GATCTGCTCT GCTGCCCTGA ACTCTTACGG CAATTTAGGT TTCTCATTTT NNTTTTCTTT 60
 TTACATATGT ACAAATTGTT TTAAGCTTTG GCCTCTATCC AGGTTATNCT GACAATGAAG 120
 AAATGGGAGT TGTCAGAGCA TTAAATGCA ATCTTCACTA AAANCAGTGA AA 172

SEQ ID NO:2967

SEQUENCE LENGTH:170

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03510

SEQUENCE DESCRIPTION:

GATCTCTAAT ACAGTATCTA ACACAAAAGA AGCTTTAAAA AGACAGTTTC TTTCTTATT 60
 TGATTAGCTA GAAGTTTATC TAGGTAAAAG CAAAAAAAAA ANTTNCAAN GCATANCATA 120
 NCATTGGGGT TCTTTTATA CTCAAGATGT TTANCTGTTC AAANTGNCAN 170

SEQ ID NO:2968

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03511

SEQUENCE DESCRIPTION:

GATCCAGGCG GGAGCAGAAG CTAAAGCCAA AGCCCAAGAG AGTGGCAGTG CCAGCACTGG 60
 TGCCAGTACC AGTACCAATA ACAGTGCCAG TGCCAGTGCC AGCACCAGTG GTGGCTTCAG 120
 TGCTGGTGCC AGCCTGACCG TCACTNTCAC ATTTGGGCTC TTCGCTGGCC TTGGTGGAGC 180
 TGGTGCCAGC ACCANTGGCA GCTCTGGTGC CTGTGGTTTC TCCTACAAGT GAGATTTTAG 240
 ATATTGTAA TCCTGCCAGT TTTTNTTTT TCAAGNCAGG GGTGTCATNC TNAGAAAACC 300
 CTACTCNACA CAGCACTTCT TANGGTAGGC CNCTTATTCA ANTTCAATTT NNAGN 355

SEQ ID NO:2969

SEQUENCE LENGTH:258

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03512

SEQUENCE DESCRIPTION:

GATCTCGGAT GCCATCCCCG AGCTGAAGGC CTCCATCAAG AAGGGGGAAG ATTCGTGAA 60
 GACCCTGAAG TGAGCCGCTG TGACGGGTGG CCAGTTTCCT TAATTTATGA AGGCATCATG 120
 TCACTGNAAA GCCGTTGCAG NTAACTTTG TATTTNAATT TGCTTTGGTG ATGATTACTG 180
 TNTTGACATC NTCATGCCTT CCAAATTGTG GGTGGCTCTG TGGGCGCATN ANTANAGCC 240
 GTCCTTGATT TTGGGAAA 258

SEQ ID NO:2970

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03513

SEQUENCE DESCRIPTION:

GATCACAAGA GGGCCATTG TAGTGGCTGG TTGACAACGG CTGGNGCAAA TTAAATAAAT 60
 AAAATAGCTC TNTCTTTCAA A 81

SEQ ID NO:2971

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03514

SEQUENCE DESCRIPTION:

GATCTNAGAC ATCCCATCT TTGTAAGCAG AACAGTACGG CACTTCACCA CATCTNCTTC 60
 CCACCATGCT TCTAAGCAGC TGTNTTCCC CTGCTAATGT TACAACCAAA GCAGCCACCC 120
 CACCTCCTNT NGTGTGAGC CTCACGACCT NTGACCCAGC TGGAAAGCN 169

SEQ ID NO:2972

SEQUENCE LENGTH:168

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03515

SEQUENCE DESCRIPTION:

GATCTCATTA CTGCTTTTCT TTTATGTCCT TTTGTCTCCA TGGGAGGTTG AGCTTCTTTT 60
 CCTACAAGTT TACTTACTGT TTGCATTTAC TTTTCTTTG CATTGTCTGT TCCAGTCCTC 120
 TGGCTATTTG ACTATTGTGT AATAAAAGGA CCAAAAACAA ATGTGGTN 168

SEQ ID NO:2973

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03516

SEQUENCE DESCRIPTION:

GATCTTGCTG CAGCCACAGT GCAGNTCCAC ATTAAGTCTA CAGACCAAAC CATTGTATC 60
 TGGCATCACT TACTAACACA CGNCATGCGG CTTTTCTGCA TCAACTGCTA TGACGGTTAA 120
 GANTGTCAGT ATACAAGNAG GGATAGAAAA CTGGTACTGT TTTAAATAAT CTGTAATNTC 180
 AATGTTTTT TTTTNTTTC GGAAANNCNT NGTTTTGCC GNTTN 225

SEQ ID NO:2974

SEQUENCE LENGTH:169

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03517

SEQUENCE DESCRIPTION:

GATCTTCTGT GGTGCTTAAG GNAAGTTACT AGAGCTCCAC TAACAGTCTC ATAAGGAGGC 60
 AGCCATCATA ACCATTGAAT AGCATGCAAG GGTAAGAATG AGTTTTTANC TGCTTTGTAN 120
 GCAATGGNA AAGGTCAATA AAGNTATATT TCTTTAGNAA ATGGGCAAA 169

SEQ ID NO:2975

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03518

SEQUENCE DESCRIPTION:

GATCCCAACT CCCATGACCT CTGGCTTCAG TGGTGGGTGG GGCAGGGCAG ATGAAAGGGC 60
TTCAGTGGGA ACCTCTGAGA GCATTTTCCT GTTCCCCCTA TCAACCGCCC CCAGTGATAA 120
CATCTGTGAA GCCAGCCATT ACTCAATAAA CTGCAAACTT GTCTAAA 167

SEQ ID NO:2976

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03519

SEQUENCE DESCRIPTION:

GATCAGNAGC CCACTGATAA GGGGCCCTAG GGTACAGGGT GCTGCCCAGC AGGTGCCAC 60
CGAGTGTCTT CTCATTTTAT TTCAGCTCCA TTTTCCCCAT AGATGGGCAG AGGGGTGAGA 120
TTGGCTCATC CCCCTTCCAG ATTCTGCAAT AAAGCGGTGT GAGGAAA 167

SEQ ID NO:2977

SEQUENCE LENGTH:167

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03520

SEQUENCE DESCRIPTION:

GATCATTCCC TCTTTTNGGA TGTATAAGAN CCTCCGGAC AACAGAACCT ATTTNTGGAA 60
TTGCAGAAGA TAACATATTT CCCTTATTN NATTTAATCA CCATAAACCA TACCTATTTA 120
ATGAGTGTAT TCTGTGCAAT TTTTCCTCA GATTGTNTT AACTNNN 167

SEQ ID NO:2978

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03521

SEQUENCE DESCRIPTION:

GATCGACTGC CAAGCAGCAG CCGTGCCGA GGGGCTGCGT CTGACATCCT GACCTCCTGG 60
ACTGTAGGAC TATATAAAGT ACTACTGTAG AACTGCAATT NCCATTCTTT TAAATGGGTG 120
AAAAATGGTA ATATAACANT ATATGATATA TAANCCTTAA ATGAAA 166

SEQ ID NO:2979

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03522

SEQUENCE DESCRIPTION:

5 GATCTGGGCG GGGTGGTGGC CTCCTCAGGG CGGATGCCAC CGGGTTCGCC AGGGGAATAC 60
 ATGTCCCCAG CTCTGGGAGG GGTTCGTAC TGGCCTCCTA CTTTCCTCCC TAGGTGGACA 120
 GTGCTCCTCT AGAGAGCTGC GACTTTAATT AAAACAACA GGAAA 165

SEQ ID NO:2980

SEQUENCE LENGTH:165

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03523

SEQUENCE DESCRIPTION:

15 GATCAGTGTG AGATATTGTT GAGGGAAGTA ATTTTATAAA GTTACACAAA GGAGTTATA 60
 AAAAAAGCCC AGTTTGTGTTT TCAGAAGGTG ACTTATATGT GCTTGAAAAG TTTAATATTT 120
 GANTATTGTG TTTAACCACA TGGTATTAAA ATTTGCAAT ATAAA 165

SEQ ID NO:2981

SEQUENCE LENGTH:163

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03524

SEQUENCE DESCRIPTION:

25 GATCATGAAA TAATGTGCTT TGTAAGGAAGA TTCAAGTTA TTAGGAAGCA TACTCTGTTT 60
 TTNAATCATG TATAATATTC CATGATACTT TTATAGAACA ATTCTGGCTT CAGGAAAGTC 120
 TAGAAGCAAT ATTTCTTCAA ATAAAGGTG TTAAACTTT AAA 163

SEQ ID NO:2982

SEQUENCE LENGTH:162

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03525

SEQUENCE DESCRIPTION:

35 GATCCGCCTG CTTGGCCTC CCAAAGTCT GGGATTATAG GTGTGAGCCA CCCTGCTCAA 60
 CCAGGTTTNA TTTTAAANT TAGTTAACT TTGGATAGAT TGTATAATAT ATAGTTTAAAT 120
 GTAATCATGC TCATATTTT NAAATAAATA AAACACTATA AA 162

SEQ ID NO:2983

SEQUENCE LENGTH:161

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03526

SEQUENCE DESCRIPTION:

45 GATCACTTGT TGTTTACTA AAGAAAGATT ACTTAGAGGA AATAAGAAA ATCATGTTTG 60
 CTCTCCCGGT TCTTCCAGTG GTTTGAGACA CTGGTTTACA CTTTATGCCG GATGTGCTTT 120
 TCTCCAATAT CAGTGCTCGA GACACAGTGA AGCAAATTA A 161

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5 SEQ ID NO:2984
 SEQUENCE LENGTH:161
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03527
 SEQUENCE DESCRIPTION:
 GATCTGAGGT CTAACATTGT TATCCTATAT CATTTCATC CCAAGTAGTG ATATCTGTGA 60
 AATCACAGGT TTGATGTGTG CTAATNATGT ATTCTTCTAA TACATATTAA AAGACATAAC 120
 10 TATCAAAACA AAATAAATTT GTCTGTTTTC AACCAAAGAA A 161

15 SEQ ID NO:2985
 SEQUENCE LENGTH:161
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03528
 SEQUENCE DESCRIPTION:
 GATCTCCATT TGATATTTTC ATTTGTATAA CTCATTTGCA GTCTGAAAAT TTTTTTGTAGT 60
 20 GCCAGTCCCT GAACATATCA TTGAAAGTTA ATTTCTTTG CATTTTAAAA TATCTGGATT 120
 ATGAAGAAAA AGTGATGAAA ATAAATTAAA ACTGAATTAA A 161

25 SEQ ID NO:2986
 SEQUENCE LENGTH:160
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03529
 SEQUENCE DESCRIPTION:
 30 GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGAACCGTGA 60
 ACAAACCTGT GTTTGAGTT TAGCTGACAT TATGGAAAAA AGTTCATCAC GTGACTGTTA 120
 ATGTAAACCT GGTATTATTA ATAACNATGA AATTACCAAA 160

35 SEQ ID NO:2987
 SEQUENCE LENGTH:157
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03530
 SEQUENCE DESCRIPTION:
 40 GATCTCTCTG TNACTGACTT TGTGACTGTC CTGTGGTTTC TCCTGCCATT GCTTTGTGTT 60
 TGGAAGGACA TGATGGGGGT GATGGACTGG AAAGAAGGTG CCAAAAAGTTC CCTCTGTGTT 120
 ACTCCCATTT AGAAAATAAA CACTTTTAAA TNATAAA 157

45 SEQ ID NO:2988
 SEQUENCE LENGTH:157
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50 CLONE:HUMGS03531

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SEQUENCE DESCRIPTION:

GATCAAANCA CCTNGGAGTG GTCACCAGGG GGACAGGGAG CCCCCACCA ATGTATCANT 60
 GGGTGATTTA TNATGCCCTC TGCCCTTTGG CGAGTGAATG GNTTCCCAT AGGGGAAGTT 120
 5 GGCTCCCTC CGTGAGCTTT GGAAATNTT TCTAATN 157

SEQ ID NO:2989

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

10 TOPOLOGY:linear

CLONE:HUMGS03532

SEQUENCE DESCRIPTION:

GATCCGAATG GNTGGGTGA GCACGAATTA CCGAGGCCTT CCCTTGNTA CAGTCCAGGA 60
 15 TTTGTAAGGN ATGAAGACCC CTGGNCCCCA TTCTNTTGGG GTCCATACAT ACTCTCCGAA 120
 GATAGCAACT TGCTTCAGGT CAAAGTNAAC CCNAGAN 157

SEQ ID NO:2990

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

20 TOPOLOGY:linear

CLONE:HUMGS03533

SEQUENCE DESCRIPTION:

GATCTCCTTA CGTAGCAGCC AAAATAAATG AAGCAAAAGA CTTGCTAGAA ACAACCACCA 60
 25 AACATTGATG CTTAAGGACC AACTGAAGG AAAAAAAG AGGGGACTTC GAAA 114

SEQ ID NO:2991

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS03534

SEQUENCE DESCRIPTION:

GATCTGATTT ACAAGAAAAA GTCAGAGCTA AACACTAGTG ATGGCATAGC ATTACTGAAA 60
 35 TCATTGTTTC TTAATTTTCAT TTTACTACAT TGTGAACTTG TGATTCAGAT TCCATTTTCT 120
 CAGAGAATTA AAAACAAAAA AAGTACTCTT GTAAA 155

SEQ ID NO:2992

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS03535

SEQUENCE DESCRIPTION:

GATCTATTTT TNAGTATGTG GTTCATGCTG TTGTGAAAAA TGTTTTACCT TTNACCTTTG 60
 45 TCAGTTTGTA ATNAGAGGAT TTCCTTTNAC CCTTTGTAGC TCAGAGAGCA CCTGATGTAT 120
 CATCTCAAAC ACAATAAACA TGCTNCTGAA GGCAAA 156

50 SEQ ID NO:2993

SEQUENCE LENGTH:154
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 5 CLONE:HUMGS03536
 SEQUENCE DESCRIPTION:
 GATCAAATTA GTAATTNNGT TTATGCTGCT CCTGATATAA CACTTTCCAG CCTATAGCAG 60
 AAGCACATTT TCAGACTGCA ATATAGAGAC TGTGTTTCATG TGTAAGACT GAGCAGAACT 120
 10 GAAAAATTAC TTATNGGATA TNCATTCTNN NCTN 154

SEQ ID NO:2994
 SEQUENCE LENGTH:154
 SEQUENCE TYPE:nucleic acid
 15 TOPOLOGY:linear
 CLONE:HUMGS03537
 SEQUENCE DESCRIPTION:
 GATCTCATTT ATAATTAAAT TATGTCTATT GGATTGTTTT NATTGACTT NATGTTTTNT 60
 NAAGAAATTG TGATTAAATA TAACTTAACG ACTTCTATT TTNCAGTTAT TTTAATTAGT 120
 20 TACTTCATTT AANCTTTTGG CATTNCATGA TTTN 154

SEQ ID NO:2995
 SEQUENCE LENGTH:153
 25 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03538
 SEQUENCE DESCRIPTION:
 GATCATATAT GTNTTAGTGG ACAGGGGTCT GAAGTACACT GGAATTTACT GAGAACTTG 60
 30 TTTGTAAAAA CTATAGTTAA TAATTATTGC ATTTCTTAC AAAAATATAT TTTGGAAAAAT 120
 TGTATACTGT CAATTAAAGT GTTTTTGTGT AAA 153

SEQ ID NO:2996
 35 SEQUENCE LENGTH:153
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03539
 SEQUENCE DESCRIPTION:
 40 GATCAAACCT CACATGNGTT TTCATTCCAA AAGTGGGTTC TAAANGCCTG GCTGCATCTG 60
 TATGNAATCA AGGCACACTC CAGGAAGACT GCCGCGTCGC GCCAACACGT CATACTCAAT 120
 GCCTCAGACT TTCATATTTT TGNNGTGCTG NNN 153

SEQ ID NO:2997
 45 SEQUENCE LENGTH:152
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03540
 50 SEQUENCE DESCRIPTION:

55

5 GATCCCAGCA TCTTCTCCAC TTCAGCGCTG AGTTCAGTAT ACACAAGTGT CTGCTACAGT 60
 CGCCAAATCA CCAGTATTTG CTTATATAGC AATGAGITTT ATTTGTTTA TTTGTTTGC 120
 AATAAAGGAT ATGAAGGTGG CTGGCTAGGA AA 152

10 SEQ ID NO:2998
 SEQUENCE LENGTH:152
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03541
 SEQUENCE DESCRIPTION:
 15 GATCATTGG ATATAGCAAT CTACTCTGAG AAATGGAACA CAAGGAGTTA CCTATCACTT 60
 TCATTATAA TTCCAAAAGA TGACTACAAC CATGTCCATG CTCAGATTCA AACAGTTTTC 120
 CATATCACTT TTGGGTGGTA ATTACAGTTT TN 152

20 SEQ ID NO:2999
 SEQUENCE LENGTH:152
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03542
 SEQUENCE DESCRIPTION:
 25 GATCCCTGTN TGCNCGNCCC CTCTGCAATG TATGCCCCTT GCCCCTTCCC CACACTAATA 60
 ATTTATATAT ATAAATATCT ATATGANGCT CTTAAAAAAA CATCCCAACC AAAACCAACC 120
 AAACAAAAAC ATCCTCACA CTCCCCAGGA AA 152

30 SEQ ID NO:3000
 SEQUENCE LENGTH:151
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03543
 SEQUENCE DESCRIPTION:
 35 GATCCAGAAG CAAACACAAG CAATGCAAGA CCTCCACAGA GTGAGCTTGG AGAGAGAGAA 60
 AGCCAAGATA AGAGAGGAGT ATGANGAGAA ANTCAGAAAG CTGGAAGATA AAGTGGAGCA 120
 GGNAAAGAGA AAGANGCAAA TGGNGANGAN N 151

40 SEQ ID NO:3001
 SEQUENCE LENGTH:151
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03544
 SEQUENCE DESCRIPTION:
 45 GATCTGGAGA TAANTTTATG CCTTTGGCCA TAGACAGGAC TGGAATCCCA GTTCTGCCAC 60
 TTACTGGCTG TTTGACCTTA GGCAAGCCAC TCCTCCTTN TNAGCCTCAG TTTCTTTNCC 120
 TGTAAGATAA AAAGAATGAN TCATTACTAA A 151

50 SEQ ID NO:3002

55

EP 0 679 716 A1

SEQUENCE LENGTH:150
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 5 CLONE:HUMGS03545
 SEQUENCE DESCRIPTION:
 GATCAGGGCT GGGGCGGGGA AACAGGGAA GGACCTTGA AGGGGCTGNN CCCAGGCCTG 60
 GGGGCGAGTC GTGGGAGCCC CTCTCANCTG TGGGGCTGGC ACAGAGCCCC AGGCAAGCTT 120
 10 TTAATAAACT GTTGGTTATT CTAACAGAAA 150

SEQ ID NO:3003
 SEQUENCE LENGTH:149
 SEQUENCE TYPE:nucleic acid
 15 TOPOLOGY:linear
 CLONE:HUMGS03546
 SEQUENCE DESCRIPTION:
 GATCTCAAAA ATAGGTAATT TTTCTTTGCC GACCTGTAAA AGTGTGCCAA TACACTAAAT 60
 20 TTGTGATTTT AAATTAATTC CTCCAGCTGT TGAAATGAAG TCTGCCAAAT CTTGCTCTAA 120
 CAAATAAAAT GTTATCTAAA TGAAGTAAA 149

SEQ ID NO:3004
 SEQUENCE LENGTH:149
 25 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03547
 SEQUENCE DESCRIPTION:
 30 GATCCTAAAA GGGAAAATTG CCTTGTAAC TTNAGATTC CTGTGGAATT GTGAATNCAT 60
 ACTAAGCTTT CTGTGCAGTC TCACCATTTG CATCACTGAG GATGAAACTN ACTTTNGTNT 120
 TTNGGAGAAA AAAAAGTGTN CTGCTTGTN 149

SEQ ID NO:3005
 35 SEQUENCE LENGTH:242
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03548
 SEQUENCE DESCRIPTION:
 40 GATCCTAGGA TGCCTCCAG ACGCTCAGTC AGAAGTGCTG GAGGTGGGGC CTGGGAAGCT 60
 GTATTGTAA TNAAGTCTGG NGTTTTTTGT CCATTAAAGT GTATCTTTGT CCATCCTATA 120
 AGNTTANNGG AAAGAAAAAG CATCTCAAAT NAGTGTAAGT TGTCTTGAG AAAAAAATGT 180
 ATCAGACTTT TATGATTGA ATGAAATGTA TTATAGNAAA ANATAAACAC NTTTAAANTA 240
 45 AA 242

SEQ ID NO:3006
 SEQUENCE LENGTH:148
 50 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

55

CLONE:HUMGS03549

SEQUENCE DESCRIPTION:

5 GATCCAGTTG TACTTAAGTG TGTAACAGGA ATATTTTGCA GAATATAGGT TTAAGTGAAT 60
 GAAGCCATAT TAATAACTGC ATTTTCCTAA CTTTGAAAAA TTTTGCAAAT GTCCTAGGTG 120
 ATTTAAATAA ATNAGTATTG GGCCTAAA 148

SEQ ID NO:3007

SEQUENCE LENGTH:148

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03550

SEQUENCE DESCRIPTION:

15 GATCATCGTG CTCTCAGACT CTGATTAGCT GCCTCCCCTT CTCCTGCCT CCAGAATGTT 60
 CTGGGATAAC ATTTGGAGGA AGGTGGGAAG CAGATGACTG AGGAAGGGAT GGACTAAGCT 120
 AATCCCCTTT TGGTGGTGT TCTTTAAA 148

SEQ ID NO:3008

20 SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03551

SEQUENCE DESCRIPTION:

25 GATCAGTCCA CCCAGAGTTA GACATTGTTT TTGTAGAAAA CAGGTATTTA TTATGTCTAG 60
 GGTTTTGTGT TTTTTTTTTT TCCTNANAGG NTAAAAGCCT TTATACAGAA ANAATTTGGA 120
 ACCTTTNATA TAAAACCTTT TCTTTAAA 148

30 SEQ ID NO:3009

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS03552

SEQUENCE DESCRIPTION:

40 GATCGCTGTG GTTCTTATTA TCAAAATTAA GTTTACTTGT ATACGGAACA ACCACAAGAA 60
 ATTTGATTCT GTAAAGAATC CTCTTTAGCT GTGGCCTGGC AGTATATAAA TGGTGCTTTA 120
 TTTAACAGAA TACCTGTGGA GGAATAAAG CACACTTGAT GTAAAANTAA A 171

SEQ ID NO:3010

SEQUENCE LENGTH:145

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03553

SEQUENCE DESCRIPTION:

50 GATCTTTTAA TTTTGCAATC CTGGGCCAGC TAGAAGCCAG GAGCTGATTG ACCTTTTAAAC 60
 TTTTTCAGT GGCCACATTT TGGTTATCGA TGTACCTAGA AGTATGTAAA TNAGATTAAA 120
 TTCTCTTCT GGAACACCC TGAAA 145

55

5 SEQ ID NO:3011
 SEQUENCE LENGTH:144
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03554
 SEQUENCE DESCRIPTION:
 10 GATCATAGAG AATGGTGCTT TTTACTACAG TTAGCACATG CATTTTTAGA AACTACTACA 60
 TGTTTTAGAG AATCTTTGCT GTGTATATGT AAAGTGTATT GTTCAACTGT TAACAAATAA 120
 TAAATTATTT CATTATTAAG AAAA 144

15 SEQ ID NO:3012
 SEQUENCE LENGTH:144
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03555
 SEQUENCE DESCRIPTION:
 20 GATCTGCCCT NCTCCTTCTA AAGGGTAAGT CATAATCTGT GTAATACTAC AATTNATGGG 60
 NTGCTCACTA TGCCCTGTTT CTNTNCTAAA CAATTACAT GTAATGTCTC ATTCCTCACA 120
 ATAACCCTTG TAAAGTGGGC ANNN 144

25 SEQ ID NO:3013
 SEQUENCE LENGTH:142
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03556
 SEQUENCE DESCRIPTION:
 30 GATCCCCAGC TGCCTCACTT CTCTCTTGGG AACTTGGCTC AGGGCTCCTG AGGACCTTTC 60
 CCAGCATTAC CTTCCCTTCC CTTGAAAGGC AATTGTTGGC TGTTTTTATA AGCAGGAAAA 120
 NTAAACAGAA GTATAAAGGA AA 142

35 SEQ ID NO:3014
 SEQUENCE LENGTH:142
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03557
 SEQUENCE DESCRIPTION:
 40 GATCAAATGT GCCTTAATAA ATTTNTTTC ATTTAGATT CAAACAGTGA TAGACTTGCC 60
 ATTTTAATAC ACGTCATTGG AGGGCTGCGT ATTTGTAAAT AGCCTGATGC TCATTGGAA 120
 AAATAAACCA GTGAACAATA AA 142

45 SEQ ID NO:3015
 SEQUENCE LENGTH:147
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50

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CLONE:HUMGS03558

SEQUENCE DESCRIPTION:

5 GATCTAAAGA AACAGTTGGC TGTAGCTGAG GGGAAACCCC CTGAAGCCCC TAAAGGCAAG 60
 AAGAAAAAGT AAAAGACCTT GGTCATAGA AAGTCACTTT AATAGATAGG GACAGTAATA 120
 AATAAATGTA CAATCTCTAT ATACAAA 147

SEQ ID NO:3016

10 SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03559

SEQUENCE DESCRIPTION:

15 GATCCAGCA ATGAACTGTT CTAGGGAAAG TGGCTTCCTG CCCAACTGG ATGGGACAG 60
 TGGGGAGTGG GGTGGGGGGA GCTATTCCA AGGCCCTCC CTGTTTCCC AGCAATTAAA 120
 ACGGACTCAT CTCTGGCAA 140

20 SEQ ID NO:3017

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03560

25 SEQUENCE DESCRIPTION:

GATCTCAGCT TTGAGAAGCC TTCAGCTCCA GGAATCCAA GCCTCCACAG CGAGGGCAGC 60
 TGCTATTTAT TTTCTAAAG AGAGTATTTT TATACAAACC TACCAAAATG GAATAAAAGG 120
 CTTGANGCTG TGGCTGAGT GCCTCACTGG AAA 153

30 SEQ ID NO:3018

SEQUENCE LENGTH:134

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS03561

SEQUENCE DESCRIPTION:

40 GATCACGAAG GTGGTTTCC CAGGGCGAGG CTTATCCATT GCACTCCGA TGTGCTGACC 60
 CCTGCGATTT CCCCAAATGT GGGAACTCG ACTGCATAAT TTGTGGTAGT GGGGGACTGC 120
 GTTCGCGCTT TAAA 134

45 SEQ ID NO:3019

SEQUENCE LENGTH:131

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03562

SEQUENCE DESCRIPTION:

50 GATCTATCTT NCAGAAAGTA TGTTTTCTT CATAAAAGTG CCTCTTAATT GGCCATTGTA 60
 CCAGCCACTT GTCCTAGCCA AATGTCCAAA ACACGCCCTT GGGCCCCGCC ACGTTACAAT 120
 CCACANNNNN N 131

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EP 0 679 716 A1

5 SEQ ID NO:3020
SEQUENCE LENGTH:131
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03563
SEQUENCE DESCRIPTION:
GATCACTGTN ATGTGTGGTC CATCTCTGAC CAAAACGTTA TGCAGTACGT GACTGTATCC 60
10 TNATCCTCAA TAATCCTTGG TTATTATTCT AGAATTTCAA ATAAATGGAA TCATATCATT 120
TACTATGTAA A 131

15 SEQ ID NO:3021
SEQUENCE LENGTH:207
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03564
SEQUENCE DESCRIPTION:
20 GATCCAGTGA ATGATTCAAG AGAGCTACAT TTGAAGCCTG TACAAAAGCT TATCCCTGTA 60
ACACATGTGC CATAATATAC AAACCTTCTAC TTTCGTCAGT CCTTAACATC TACCTCTCTG 120
AATTTTCATG AATTCTATT TCACAAGGGT AATTGTTTA TATACACTGG CAGCAGCATA 180
CAATAAANCT TAGTATGAAA CTTTAAA 207

25 SEQ ID NO:3022
SEQUENCE LENGTH:130
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03565
30 SEQUENCE DESCRIPTION:
GATCCTGAGA ATTACTTTTA ATAAAATCAT TTTTTTGCTG TTATTAAAAAC TAGNCNNGAA 60
TTGCCTAAAN CCAAGAACTC TGCTTGATAA AATAAGCATA GTNTTAGGAA CAGCCATGCA 120
GATATAANTN 130

35 SEQ ID NO:3023
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
40 CLONE:HUMGS03566
SEQUENCE DESCRIPTION:
GATCATCGAC CCCCAAGGGA CCCGCAGACC CTAAAAAAA TCACCCACAA CCCTCTGGAA 60
GTGGCCTTGC CCGGTCCCCT TCCAGGGGC GAGGTCGGCA AAGCAACATG GCAGAGCAGT 120
45 CATAGGAAA 129

50 SEQ ID NO:3024
SEQUENCE LENGTH:129
SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03567

SEQUENCE DESCRIPTION:

5 GATCACCTTT TTTTATGC GTTGTGAATA GCAGTCTGCA TCCTAAGTTT AAAATATTTG 60
AGAATCCTCT ATGGGACTCT CTGTAAATNT TTAAATACT GTTGTTTCA ATAAATATTT 120
TATACTAAA 129

SEQ ID NO:3025

10 SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03568

15 SEQUENCE DESCRIPTION:

GATCAGCTGT CCTCTCTGAA AAAAATTGCA CCNNTTTTTC TTTTAAAAA TTTTGTGCA 60
TCTTCGTAGT AATGTAATTG TATTTTATGC CTGCTTTTTT ATAAAAAAAT AAAATAAAAT 120
AAATGGAAA 129

20 SEQ ID NO:3026

SEQUENCE LENGTH:129

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25 CLONE:HUMGS03569

SEQUENCE DESCRIPTION:

30 GATCTAAATN TGA CTGTGGT TGCACATATC TGTGNATATA CTAAAAACCA NTGATTTGTA 60
CACTTTACAT GGGTGAGTTG TATGGTGTGT GAATTATATT TCAATAAAGC TGGGTGTTT 120
TTTGTCAN 129

SEQ ID NO:3027

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS03570

SEQUENCE DESCRIPTION:

40 GATCCCAGGA TTCAGTATTC CTGCCCCAGA GGCNTTGCT GGCTACTGGG TGTTAGTTTG 60
CAGTCCTGTG TGCTTCCCTC TCTATGACT GTGTCCCTGG TTGTCAATAA AATATTTCTT 120
GGCCTCCTGG AATCTNTAAA 140

SEQ ID NO:3028

SEQUENCE LENGTH:127

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03571

SEQUENCE DESCRIPTION:

50 GATCCTACGA CAGGACCCAG ATGCCAGTGA AAGTGACCAC AGCCCTGCTC TAGTCACCCC 60
GGAAGCTGAC CAGTCTACGC ACGGCCGAAG CTTCTGCAAG GAAGTAAATG TAGTTAGAAA 120

55

TCTTAAA

127

SEQ ID NO:3029

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03572

SEQUENCE DESCRIPTION:

GATCTAGAGT ATAAGCTGCG CAAGGGCAGA AGTTTTTATC TGGTTTGTTT ATGGATGTAT 60
 TCTAAGAGCT GAGAACAGGG CCTGGACACA ATAAGCATTC AATAAATATT TACTGAATGA 120
 ATGAACTCCT ACCTATATTC CTATTTATAA TTTGGCTCCA CTTTATCCTA CTTTAGCTCC 180
 CATTCAATTC AATAAAAAAA ACATTTTTTN GNACACATAT AAA 223

SEQ ID NO:3030

SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03573

SEQUENCE DESCRIPTION:

GATCCATCTC AGTCACTTTT TCCCCTGCAA TCGCTCTTGT GAAATTGTGT AGAGTGTTTG 60
 TGAGCTTTT GTTCCCTCAT TCTGCATTAA TAATAGCTAA TAATAAATGC ATAGAGNAAT 120
 TAAACTGTGA AA 132

SEQ ID NO:3031

SEQUENCE LENGTH:123

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03574

SEQUENCE DESCRIPTION:

GATCCAGTTT TNCTACAAAG AACAAAGTGG TTGACAACAG TGACAGTAAT TNCTGGAGCA 60
 AAACCAAAAG ACATAGGTAA AGANCATATA ATTGTTAATA AAGCACACTG CTTCAACAC 120
 AAA 123

SEQ ID NO:3032

SEQUENCE LENGTH:124

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03575

SEQUENCE DESCRIPTION:

GATCCAAGTG TTTTAACAAT TGGGGCTGTT AAGTCTGACC ATACATCACT GTGATAGAAT 60
 GTGGGCTTTT TCANGGGTGA AGATACAAGT CTTAACCACA GTGTAACCTA CAGTTTCCTT 120
 TAAA 124

SEQ ID NO:3033

SEQUENCE LENGTH:270

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03576

SEQUENCE DESCRIPTION:

5 GATCAGAGCA AGCCTTGCCT CTTATCTTCG GGAAACCAGA ATATGTTTGG GGTGGTAGGA 60
GCCACACAGA CTCTTCTGAG CCCCTCACT CACTTCCTTC CCCCTGTGCC TTTCCTTTGA 120
GAGTGAAGGT GGGTNGAGTT GACCAGAGAA AGGGGAGAGA ATTCGGGAAA GACCCAAAGT 180
NTTTGTAATT CTCTTTGTC CTTTACCTA CAGAAATGGT CACATGGTTC TATTTAAATA 240
10 GCCTAATAAA CACATCTGGA GCCTGTCAAA 270

SEQ ID NO:3034

SEQUENCE LENGTH:127

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03577

SEQUENCE DESCRIPTION:

20 GATCTCAAAG ATACACAGTA CCTACTTAAT TCCAGCTGAT GGGAGACCAA AGAATTTGCA 60
AGTGGATGGT TTGGTATCAC TGTAATAAAA AAGAGGGCCT GGAATTCTT GCGATTCCAT 120
CTCTAAA 127

SEQ ID NO:3035

SEQUENCE LENGTH:120

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03578

SEQUENCE DESCRIPTION:

30 GATCCCTACC TGCTCCCCGC TCCGGTTGCC AGCAGCACTC ACTGCACTCC TTTGTCATAT 60
ACTGTGCATC ACTGTCATAC TCACANCTTC GTGAATAAAG TTGTGTGCTT TATTCGTAAA 120

SEQ ID NO:3036

SEQUENCE LENGTH:120

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03579

SEQUENCE DESCRIPTION:

40 GATCAGGGAC CTCACGCATC TTTTCTCAT ATACATGGNC TCTCTGTTGG CCTGCAAACA 60
CATTTNCTTC TCCGCTTATN AGACTATTTA NCTTTAATAA AGCACTGGAT ATAAATCAAA 120

SEQ ID NO:3037

SEQUENCE LENGTH:176

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03580

SEQUENCE DESCRIPTION:

50 GATCTAAAGC TNAACAATGA AAATCTTCAG CAGAAATAGA AATNGCCGTG GATTGTAATA 60

55

EP 0 679 716 A1

CACACTGAAA TTCTNACTTT CTGAATTTAA ATGTAGAATA AATTTNACCA ACTTGGAGTA 120
CTGTATGAGT ATTCNAGTA GGGGGAATAA ACTCAAANTT ATATTNTNT TGCAAA 176

5 SEQ ID NO:3038
SEQUENCE LENGTH:119
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03581
10 SEQUENCE DESCRIPTION:
GATCTGAAAT GTCTGAGAGT AATAGTTTCT GTTGAATTTT TTTTGTTC TTTTCTGCA 60
CAGTCCATTC TGTTTNATT ACTATCTAGG CTTGAAATAT ATAGTTTGAA ATNATGAAA 119

15 SEQ ID NO:3039
SEQUENCE LENGTH:234
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03582
20 SEQUENCE DESCRIPTION:
GATCAGAATA TGACATTGCA GTAAAGNGCT TAAATAGTTT CATCTNTGGT TTTTTTTTCT 60
AGACACTTTT CTTTATCCC AGNCATCTCT GAATTACAT TTTATATTAA AGAAATTGAG 120
CTATCCATAC AACCTGTATT TACTTTAATT TCACTATGCT TTCAGCTTAC TTTATTGTAT 180
25 GNTATGTAGG TCTAAATAT AGTTTGAGTC AAATAAAATT AGGGGGGCTT TAAA 234

SEQ ID NO:3040
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
30 TOPOLOGY:linear
CLONE:HUMGS03583
SEQUENCE DESCRIPTION:
GATCATGACA CTNAAGCGTG ATGAGACGCT CCAGGATGGC TGTNATACTC ACTTCTGCAA 60
GGTCAATGAG AGAGGAGAGT ACTTCTGGGN GAAGAGGGTC ACAGGCTNCC CACCCTTTNA 120
35 TGAACACANG TN 132

SEQ ID NO:3041
SEQUENCE LENGTH:118
40 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03584
SEQUENCE DESCRIPTION:
GATCCCTAAA AATGTTGAGG GACTTCTGTT CATTATCCC GAGAACATTG GCTTCCACAT 60
45 CACAGTATCT ACCCTTACAT GGTTAGGAT TAAAGCCAGG CAATCTTTA CTATGAAA 118

SEQ ID NO:3042
SEQUENCE LENGTH:117
50 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03585

SEQUENCE DESCRIPTION:

5 GATCGGACCG TTCATGCTGC CTATAGGCAT TATGTCCCTC AAAAAAAAAAC TCCTTNCCT 60
GCATCCTGTG TACAACATGA CATTTTAAAC CAATCCAATC TAAAAATGTN CCAGAAA 117

SEQ ID NO:3043

SEQUENCE LENGTH:117

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03586

SEQUENCE DESCRIPTION:

15 GATCAGAAGT GGCAGTCTAT AACTNAAAAT GTGGTAAAGT ACTTGANGCA AACATCCCGC 60
ATCGCTGTTG GACCTCTNAN ACTTTCTACT TTAACAGTTT CACAGTCTTT NCCAGTN 117

SEQ ID NO:3044

SEQUENCE LENGTH:116

20 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03587

SEQUENCE DESCRIPTION:

25 GATCTCCTCC ACCCTGTACC AGGCAGCAGC TCCAGTCCTC ACACCAGCCA AGGTCACAGG 60
CAAGAGCAAG AAGAGAAACT GACCCTGAAT GTTCAATAAA GTTGATTCTT TGTAAA 116

SEQ ID NO:3045

SEQUENCE LENGTH:116

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03588

SEQUENCE DESCRIPTION:

35 GATCTGAAAT CNNGGTCTTC CAAGGNAGAA AATCGANCTG GGAATAAAAG AGAAGACCTG 60
TGATGGGGCA GCAGTGACGC NCTGTGGGGG GACAGGTGGA CGTGGAGAGC TCTTTN 116

SEQ ID NO:3046

SEQUENCE LENGTH:116

40 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03589

SEQUENCE DESCRIPTION:

45 GATCCTGAAG AAATCATATG TTAAACATAC TTTNACACCT ACTGTGTTAT AAAATATATC 60
ATCAGATGTG CCTTGAGAAT AGTATATGTA ACATTAAAAA AAAGTTGCTG GCTAAA 116

SEQ ID NO:3047

SEQUENCE LENGTH:115

50 SEQUENCE TYPE:nucleic acid

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EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS03590

SEQUENCE DESCRIPTION:

5 GATCCTTGGA CTTTGTGTTT TTGATTNTAT GTTGATATTC TAAAAACATC TATTTTAATG 60
TTATTCTGT TCTAAAAATA AGATAATAAA TATTAACAAA CTTTGCTTTT TTAAA 115

SEQ ID NO:3048

SEQUENCE LENGTH:179

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03591

SEQUENCE DESCRIPTION:

15 GATCTCAACA AGAAGCTGTA TTTAAGTAT TAAGACAGTT CTTGTAGC TGGTTTCTAG 60
TTGGTTATCT AGTTACCAAT GCTGCAGTCC TGCAGTCACC TATACATTAT TTAAATNTAT 120
TTAACTGTTA AATGCGCTAC CCACCAATAA TGAAATAGAC CTTTATGAAA ACTGTGAAA 179

SEQ ID NO:3049

20 SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03592

25 SEQUENCE DESCRIPTION:

GATCCTGAGG AAAGACTGG AAGAGACCAG CATGTCTTCA GTAGCCAAAC TACTTCTTGA 60
GCATAGATAG GTATAGTGGG TTTNCTTGAG GTGGTAAGGC TTTGCTGGAC CCTGTTGCAG 120
GCAAAAGGAG TAATTGATTT AAAGTACTGT TAATGATGTT AATGATTNT TTTTAACTC 180
ATATTATTGG GATTTTCACC CAAAATAATG CTTTTTGAAA AAAGGAAAAA AAAACCGGN 239

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SEQ ID NO:3050

SEQUENCE LENGTH:114

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS03593

SEQUENCE DESCRIPTION:

GATCTTGCTT TCTNTTTC TCTTCTCCTN CAGGGTGTCT GTNACTGCNN GGTACTTCCA 60
GCCAACCTCG TGAGCCAGGC GCCCCAGATA GGCAAACCTT CTTGTAGGCT TCAN 114

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SEQ ID NO:3051

SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03594

SEQUENCE DESCRIPTION:

GATCTGTATA TGCTATCCTA ACTGTTAATT GTATTATTGA TTATNTTGAT TATCTTGCTT 60
GAAGGTTTCACTTTTCAAT TTGATAGAAA TAAAGTTTTT NCCTGCTTAT AAA 113

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SEQ ID NO:3052
SEQUENCE LENGTH:113
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03595
SEQUENCE DESCRIPTION:
GATCCTCTCT TCATTTTACT CAGCCAGGTT TTGTACTGAT GTACAGGTGT TAAATNACTT 60
CAAGTATTTT TGTAAGAGGT GTATATAATT CAATAAAAAA GGTA AACAT AAA 113

SEQ ID NO:3053
SEQUENCE LENGTH:161
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03596
SEQUENCE DESCRIPTION:
GATCGACAAG GAGTACTTGC TAAAAATGGC AACAGAGGAG TGAGGAGTGC TGCTGTAGAT 60
GACAACCTCC ATTCTATTTT AGAATAAATT CCCAACTTCT CTTGCTTTCT ATGCTGTTTG 120
TAGTGAAATA ATAGAATGAG CACCCATTCC AAAGCTTTAA A 161

SEQ ID NO:3054
SEQUENCE LENGTH:111
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03597
SEQUENCE DESCRIPTION:
GATCCGNACC CCAAGCCCAT GCAACCCACG CTCGGTCCCG TTCCGGCCCC TGCNCCCCGC 60
TGCNCTTCGC TCCCGNCCT TGCNCCGTTA GTAAACATCG CTCAAACGAA A 111

SEQ ID NO:3055
SEQUENCE LENGTH:110
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03598
SEQUENCE DESCRIPTION:
GATCTAACAA GTTACATTGT ATAGTTTCTG GGACTGTTTG AATATTCTAT TCCAATGGGC 60
ATTTATTTTT TATCCTGTCA TTAAAAAAA AAGACTGTTA CCCTGCTAAA 110

SEQ ID NO:3056
SEQUENCE LENGTH:109
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03599
SEQUENCE DESCRIPTION:
GATCTCCTCC ATCCTGCTGC CCACCCCTCT TGAGTGCTT AAGGGACAGA NCTTTCCACC 60
CCTGGAAGAT GGAAATAAAC CTGCGTGTGG GTGGAGTGTT AGGACCAAA 109

SEQ ID NO:3057

SEQUENCE LENGTH:109

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03600

SEQUENCE DESCRIPTION:

GATCAGAGTG TTNTAAATCA TCACGCCCTT AGCTTATCCC TNGTCGAGCC AGGACACGGG 60
GTGCTTCAGT GGGTCTGTNA CCCTCTCTCC TTGAAGCATG TTGCTGNNN 109

SEQ ID NO:3058

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03602

SEQUENCE DESCRIPTION:

GATCCCTGAA TGTGAACCTG AAGTTCAAAG GACTTGGAAA GCTCTGGAAT GTGTTGGTTT 60
TTCCCCCCTA AAATGGGTCC TAAGGAGGGT AAAGTGACTT GTTTCAAA 108

SEQ ID NO:3059

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03603

SEQUENCE DESCRIPTION:

GATCAGTTTC TTTNGCTTCA AGATTGAAA CCAGAAAGGA AAGTCCNACT TGCAGATGAT 60
TGTCTTAAAC ACCTAATGGA AAANTAAAG ANAGACATAC CATGGAAA 108

SEQ ID NO:3060

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03604

SEQUENCE DESCRIPTION:

GATCCATCAT TGTTCACAAA CTTCAGTGC AAGAACCTTT TCGTTGCATA ATGTGCAAAT 60
AGTTAAACCC ACTGTACTAT ATACTAAAA ATGATTAAGA TAGTAAA 107

SEQ ID NO:3061

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03605

SEQUENCE DESCRIPTION:

GATCTGGCAG CTGAGGCCCG AGGCAGGGTT GGNGTGATGC CAGGGCAAAG TGGTGAGGAG 60
AAAACAGGAA NCGGGCTTTC NCCNCATTGG TAAATGGGAA AGAGGTGAGC AACTTAAGAT 120

TGTCACAATT AATCACAAGT GTACAGGATT AGACTGGGTT TATATTTAAC TCTTGCTNCA 180
 TAGGTGTACC ATTTAAAGAG TGTATTATAA TGCTAAGTTT AACTGCTTTA ATAAAGTTTA 240
 TTTTAAATA AA 252

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SEQ ID NO:3062

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

CLONE:HUMGS03606

SEQUENCE DESCRIPTION:

GATCAACAAA ATAACCTGTA TCTCCTGCTT AANTCCTTTA TACTACCTGG NGAAAAGTAT 60
 TTCCCATATT TCCAATAAAT GTCAGACACT ATTGAGAAAG AAA 103

15

SEQ ID NO:3063

SEQUENCE LENGTH:103

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03607

SEQUENCE DESCRIPTION:

GATCCTGNAT NANGCCCGGG CCAGCGAGTG CAGGGACGTG GAGGGNTTCA AAACCGAGAT 60
 GGCCATGCTG GTGACCCAGG CCAGGAAGAA CACCATCACC CNN 103

25

SEQ ID NO:3064

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03608

SEQUENCE DESCRIPTION:

GATCCTCACA GTCAAGTGAC GAGGCTGGGG CTGAAAGCAG AAGCATGCAC AGGGAGGAGA 60
 CCACCTTTAT TGCTTGTCTN GGTGGATGGG TCAGGAGGGT CTGAGGGCCT GTCCAGACA 120
 ATAAAGGTNC CCTCAGCGGA TGTGGGCCAT GTCACCAA 159

35

SEQ ID NO:3065

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03609

SEQUENCE DESCRIPTION:

GATCCTATCG CCTTTNAGTA GAATATGAAA TATTCTTTNA GAAATCCAAT ATAAATAGGT 60
 TATAATAGCC ATATNCTTNA TNACTTTATT GAGATATAAT TN 102

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SEQ ID NO:3066

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

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TOPOLOGY:linear

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CLONE:HUMGS03610

SEQUENCE DESCRIPTION:

5 GATCTNAGCT CCCACCTCCC TTCCCACCTA CTGCACTTTC CCCCTTCCCG CCTTCCAAAA 60
 CCTGCTTCCT TCAGTTTGTA AAGTCGGTGA TTATATTNT GGGGGCTTTC CTTTNATTN 120
 TAAAATGNAA AATTTATNTA TANTCCGTAT TTAAAGTTGT AAAAAAATA NCCACAGAAC 180
 AGNGAN 186

SEQ ID NO:3067

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SEQUENCE LENGTH:100

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03611

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SEQUENCE DESCRIPTION:

GATCTCAGAC AGTGTGCGGC GGCACATGAG CGGCTTTCAG CAGTGTCTTG TTTGAGCCA 60
 CTGCAGTCTG GGCCCCATCA TTAAACGGGC TGCCTTTAAA 100

SEQ ID NO:3068

20

SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03612

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SEQUENCE DESCRIPTION:

GATCTCCAGT NAGACTCCAG GGTCTAGAC AGAGGCCAGT NTTGGCCACT CACCCACAC 60
 CCCGCGGACC CCAATAAAGG CTTCATAGC TCCAGAAA 98

SEQ ID NO:3069

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SEQUENCE LENGTH:98

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03613

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SEQUENCE DESCRIPTION:

GATCCTGAAG CTTNACCGGG CTCCAAAGGG CAAATGGAGC TGCCCTCNTC TGTATCAGGT 60
 TTATTGGTTG TACATATAAA TNATACTTNC CTTTCAA 98

SEQ ID NO:3070

40

SEQUENCE LENGTH:107

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03614

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SEQUENCE DESCRIPTION:

GATCCTGTTT AACAAAGATA CTTGAGACAT CCATTTGTTT TAATGAAATC TGTATGGATA 60
 TGGAAATNCT TGCCCTAATA AAAGCCTACA TATACCTTCT GGTAAA 107

SEQ ID NO:3071

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SEQUENCE LENGTH:97

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03615
 5 SEQUENCE DESCRIPTION:
 GATCTNTCCG TTCTCAGGCC AGACCCCTGG TGCTGCCGTT AATTTTTTTT TCTCTGTCTT 60
 TGCTGCAATN TTNAATAAA ATGCCAAAGA ACACAAA 97

10 SEQ ID NO:3072
 SEQUENCE LENGTH:95
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03616
 15 SEQUENCE DESCRIPTION:
 GATCCTAAAC AAATCATCTT TGTCAGTTAA GTATAGTTGC GCAAAAATTG TTAAATCCTT 60
 TGTCTTTATT AAAGAAAAAT TTGAGTAACA TTAAT 95

20 SEQ ID NO:3073
 SEQUENCE LENGTH:94
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03617
 25 SEQUENCE DESCRIPTION:
 GATCTAAGTG ATGAGTCTAG GTGTGTTATT GTNCAGTTTT TNCAACTTTC CTGGAAAACG 60
 AACTTTTCAA AATAAAAAAT TGGAAAAATA GAAA 94

30 SEQ ID NO:3074
 SEQUENCE LENGTH:183
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03618
 35 SEQUENCE DESCRIPTION:
 GATCACTTTG AGAAACAAAC TTTTATTAAA TGTAAGGCAC TTTTCTATGA ATTTTAAATA 60
 TAAAAATAAA TATTGTTCTG ATTATNACTG AAAAGATGTC AGCCATTTC AATGCTTGGG 120
 AAACAATTTT TTGTTTTTGT TCTGTTTCT TTTTGCTTCA ATAAACAAT AGCTGGCTCT 180
 AAA 183

40
 45 SEQ ID NO:3075
 SEQUENCE LENGTH:92
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03619
 SEQUENCE DESCRIPTION:
 GATCTGCCAT ATTTGNTNTT GGTTTTAATT TTCATATCCA GCCTAAAGGT GGTGTTTAT 60
 NATATAGTAA TAAATCATTG CTGTACAATA AA 92

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5 SEQ ID NO:3076
 SEQUENCE LENGTH:92
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03620
 SEQUENCE DESCRIPTION:
 GATCAGGCTG CCTCCTGGNT TGGNTGTCGG GGGAGCTGTC CGGCAGCCTG GCAGGGAGAT 60
 10 GCAAGGCCTA AAGTAAAATT TTNTCAAGTA AA 92

15 SEQ ID NO:3077
 SEQUENCE LENGTH:91
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03621
 SEQUENCE DESCRIPTION:
 GATCTAGCCC CTTCCTCAGG CCGAGAGAAT TTCGAGCGTT ANCCGTCTCT TGGCCACCAG 60
 20 CTAAATAAAC GGATTCTTCA TGTGTCTCAA A 91

25 SEQ ID NO:3078
 SEQUENCE LENGTH:91
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03622
 SEQUENCE DESCRIPTION:
 GATCTGCTAT TGTTATTTCT CCTCTTTATT GGAAAAAGGC CTCAGTTTTA ATTATTTTCT 60
 30 TCCCAAATA AATNACACAT TTGGTTACAA A 91

35 SEQ ID NO:3079
 SEQUENCE LENGTH:239
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03623
 SEQUENCE DESCRIPTION:
 GATCCTGCAT CAGCATTGTA TATATGGNCT TAAGTGCCTG GCCTCCTTAT CCTTCAGAAT 60
 40 ATTTATTNA CTTACAATCC TCAAGTTTTA ATTGATTTTA AATATTTTCC AATACAACAG 120
 TTTAGGTTTA AGATGACCAA TGACAATGAC CACCTTTGCA GAAAGTAAAC TGATTGANTA 180
 ANTAANTCTC CGTTNN TTC ANTTNATTC AGTGAATGA NAANGTTGCT TAGTATTN 239

45 SEQ ID NO:3080
 SEQUENCE LENGTH:196
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03624
 SEQUENCE DESCRIPTION:
 50 GATCCCTGCC CTGACCAGC ACCCTGANAT GGAGCTGAGA CTTTATTTAT TGGGGGTAGG 60

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GGGATGGAGG AGGTCCCTCC AACATGTTTG GACCCAGCTC CTTTGGGTTC CACTGACACC 120
CCTGCCCCCTG CCCCTGCCCA GAACCAAGTG CCATTCTCA CTCTGGAGCC TTAATAAACT 180
GCAATTGTGA TCCAAA 196

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SEQ ID NO:3081
SEQUENCE LENGTH:90
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03625
SEQUENCE DESCRIPTION:
GATCTGTGTA CTGTTTACTT CCCACTTCCC AGAATCCCTT GTATCTCCTT TCTCGGGAAT 60
TGTATTTTCT AATAAATGAC ATTTGAGAAA 90

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SEQ ID NO:3082
SEQUENCE LENGTH:90
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03626
SEQUENCE DESCRIPTION:
GATCTCTGGA AGTGTAATTN TGAAAGAAAC TTNCTTGCAG CTTTAACAAA ATGAGAAACT 60
TNCCAAATAA AACTTGTTTT GAAGTTTAAA 90

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SEQ ID NO:3083
SEQUENCE LENGTH:89
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03627
SEQUENCE DESCRIPTION:
GATCCTCGGG AAGAACAAAG CTAAAGCTGC CTTTGTCTG TTATTTTATT TTTTGAAGT 60
TTAAATAAAG TTTACTAATT TTGACCAA 89

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SEQ ID NO:3084
SEQUENCE LENGTH:88
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03628
SEQUENCE DESCRIPTION:
GATCAATCTT TGATGGTGAG GGTTTTAGAA AGGAAAAATA TAGTAAATG TGTAATTTGT 60
CTTAATAAAA TCTATCTNTA CATCTAAA 88

45

SEQ ID NO:3085
SEQUENCE LENGTH:94
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03629

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SEQUENCE DESCRIPTION:

GATCTAGATT GGGTGAGGGG GACGGGGATG TNAGGGAGGC AAGTGTGTN TGTACTGTG 60
TCAATAANCT GGTTTAAAGT TGTAAGTGN GAAA 94

SEQ ID NO:3086

SEQUENCE LENGTH:89

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03631

SEQUENCE DESCRIPTION:

GATCTGAATT TCACAAAAAG TTCATGGAGA AATATATTAA ATAGTACAGT TTTATGTGCT 60
TAATTAAAGA CTGTAAACG TAAAGGAAA 89

SEQ ID NO:3087

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03632

SEQUENCE DESCRIPTION:

GATCATACCA CGGCACTCCA GACTGGGGAC CAAAGTGAGA CCTTGTCTTCT AAAANTTAAA 60
ATATTTAGAA TGTTCTCTAG CAAA 84

SEQ ID NO:3088

SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03633

SEQUENCE DESCRIPTION:

GATCCCAAGG ATGGAGAACA ACTTACCCAG TAGCTAGAAT GTTAATGGCA GAAGAGNAAA 60
CAATAAATCA TATTGACTCA AA 82

SEQ ID NO:3089

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03634

SEQUENCE DESCRIPTION:

GATCTCCAGA TGTGCATTTC CCTCTCTTAT TTAAAGTTAT GTTAAGATTA CTAAAACAAT 60
AAAAGCTCCT AAAAAATCAA A 81

SEQ ID NO:3090

SEQUENCE LENGTH:79

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03635

SEQUENCE DESCRIPTION:

GATCCAACCG TGCCTGAAGC TAGAATATCC CCTGGACTTT TCAGTTATGT GAACCAATAA 60
ATACCCTTTT TTGCTTAAA 79

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SEQ ID NO:3091

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS03636

SEQUENCE DESCRIPTION:

GATCTGNGAN ATATTATGGT AATTGTGTCG GGGCGCCATG AACCGCACCC ATATAACACG 60
GTAAACTTAA TCAGCAAA 78

15

SEQ ID NO:3092

SEQUENCE LENGTH:77

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS03637

SEQUENCE DESCRIPTION:

GATCATGCTG AAAACCACTC AAACGATTAT ATTTTTTACA TTATAAGAAG TAAAAATATAT 60
TATTCTGAAT AATGAAA 77

25

SEQ ID NO:3093

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS03638

SEQUENCE DESCRIPTION:

GATCTGTGCA TTGCTCCTTC TGATTTGTGC TAAGTTGTGA AATAAGAGGG ACCCTGAGAA 60
AGGCCTTACT CTAAG 75

35

SEQ ID NO:3094

SEQUENCE LENGTH:75

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS03639

SEQUENCE DESCRIPTION:

GATCACACAG CTAACGAGGC TGCCTCCAGC ATTCCTGAT TTCCTCTGTG GTAATAAAG 60
CTTTCTGTGC TTAAG 75

45

SEQ ID NO:3095

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS03640

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SEQUENCE DESCRIPTION:

GATCAGAACT TACAAACCAA ACTTTTATTC TGAGAAACTG GCTGTACAAT ATNTGAAAAG 60
 AAAGTGACAT GNAGGAAA 78

5

SEQ ID NO:3096

SEQUENCE LENGTH:74

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

10

CLONE:HUMGS03641

SEQUENCE DESCRIPTION:

GATCTTTTNN AAGTNTTCTG AAAGGAAGTA GACAGTATTA CACCCTGAAT AAATAAGGTG 60
 TTGTTTTCCA CAAA 74

15

SEQ ID NO:3097

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

20

CLONE:HUMGS03642

SEQUENCE DESCRIPTION:

GATCTACTTC CCATGCAGAA GAGAAGTCAC ATCTTCAGG GAATCGCAAT GTTGTGGCGT 60
 CTGACTTGTA TGTACATTT GTGTAAAATG GTATATNCTT TAAAATAGTG TTGATAACTG 120
 GAATATTGTA TGTATGCTTG GAGATGCTTT GTGTGAACCT AAGACTGTCA CTCAACAGAT 180
 GTTGGATTGG GGNAAATCCA AAGCACAAC TCAAANTAAN NTACATTTT AGGTTTCGAT 240
 GCTGCAAANC ANANAANN ACANNAN 267

25

SEQ ID NO:3098

30

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03643

35

SEQUENCE DESCRIPTION:

GATCATGGTG ATGTACGGGG TGAATTCTCT TGCCGTGTTG CAAATGTGTA AAATAAAGAT 60
 TATCTGGCAG AAA 73

SEQ ID NO:3099

40

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03644

45

SEQUENCE DESCRIPTION:

GATCCNAGNT CTANCGTCAT ATAATCATTT AATATAATTA AAGTTTAATT GCTGAAATAC 60
 TTATAATGAA A 71

SEQ ID NO:3100

50

SEQUENCE LENGTH:69

55

SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03645
5 SEQUENCE DESCRIPTION:
GATCATGCAA TTCCTTCAAT TATGATGGAA AGACTTGAAC TTTCTGAAAT AAAACAAAAA 60
TACAGCAAA 69

10 SEQ ID NO:3101
SEQUENCE LENGTH:67
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03646
15 SEQUENCE DESCRIPTION:
GATCCATTTA TTGCAATTCA TGCTGAATCT AAATTATAAA ATTTAAAAAT AAATGCATAT 60
CCTCAAA 67

20 SEQ ID NO:3102
SEQUENCE LENGTH:65
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03647
25 SEQUENCE DESCRIPTION:
GATCCGAAAC CTGTTAAACA ATAAGATGTG TTCTCGGAAA ATNAAACAAG AGGTATCACA 60
AGAAA 65

30 SEQ ID NO:3103
SEQUENCE LENGTH:64
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03648
35 SEQUENCE DESCRIPTION:
GATCATCTCT TCTCCATAAG ATAGTGTGAT AAACACAGTC ATGAATAAAG TTATTTTCCA 60
CAAA 64

40 SEQ ID NO:3104
SEQUENCE LENGTH:64
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03649
45 SEQUENCE DESCRIPTION:
GATCGCTCCA ATAAACATAT ATTGTGAAAA TGCATCCACA ATAAATGGAA TTCCTTCCTG 60
CAAA 64

50 SEQ ID NO:3105
SEQUENCE LENGTH:63

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SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03650
 SEQUENCE DESCRIPTION:
 5 GATCTACCTG TCTTGTTGCC ACATGTTTCT AAAGTTTCCA ATAAATCACC TTCTACTGAC 60
 AAA 63

SEQ ID NO:3106
 10 SEQUENCE LENGTH:68
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03651
 SEQUENCE DESCRIPTION:
 15 GATCAGCATC AGGCTGTTAT CAAGTCTGTT GGTGCTAAAA AGTAAANAT GAAATGTTCA 60
 AAGAGAAA 68

SEQ ID NO:3107
 20 SEQUENCE LENGTH:58
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03652
 SEQUENCE DESCRIPTION:
 25 GATCTGTCTG GCTCCTTGT TTCTATTAA ATAAATTCT GTCTTCTATT GTTTCAA 58

SEQ ID NO:3108
 30 SEQUENCE LENGTH:58
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03653
 SEQUENCE DESCRIPTION:
 35 GATCAGCCTT NNTATAATGT TTTTAAATC ATTTCTAAAT AAAACAGAAA TACAGAAA 58

SEQ ID NO:3109
 40 SEQUENCE LENGTH:55
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03654
 SEQUENCE DESCRIPTION:
 GATCTAGACT TATATGAATA AATNAAATTA CATGCCAAGG GCCCTAAAA GCAAA 55

SEQ ID NO:3110
 45 SEQUENCE LENGTH:53
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 50 CLONE:HUMGS03655

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SEQUENCE DESCRIPTION:
 GATCAGGGCC GAGCAGAACC GCACTCTTCC CAAATAAAGC TTCCTCCTTG AAA 53

5 SEQ ID NO:3111
 SEQUENCE LENGTH:55
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03659

10 SEQUENCE DESCRIPTION:
 GATCATATTT TTNATACAG GTATTTCAT TAAATGTTT TTGTACATAG TGAAA 55

15 SEQ ID NO:3112
 SEQUENCE LENGTH:76
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03661

20 SEQUENCE DESCRIPTION:
 GATCCAATCA NTTAAATAAA CCTGTATGTA TATGCATATG TNTACATGCA TATCCCCTCC 60
 TGCTAAAACT CATAAA 76

25 SEQ ID NO:3113
 SEQUENCE LENGTH:451
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03679

30 SEQUENCE DESCRIPTION:
 GATCCCTCAG TTTCTTCTTG ATTTCAGCAT GTNTCGGGTT CCTAATTTAT GGTATGAGTT 60
 AGCAAATTTA ACCATTGTGT TTGTGCCCTA CCCAGGGGAC TCCCCAGTTT CTGACTTGAA 120
 GTAGACTGAG AAGAATCCAC GAGGTGCTAT CTGGCCAGAT TTAAGTAGAT TCTATTTCTT 180
 TGGTTCTCCC TCTCCCTGAG GACCTCTTAT TTNATTGTCC CCTCTTCTAG GTTAATTCTC 240
 35 CTTTGATTG ACTTTGTTGA GAAGGAGGTT GGACAGTAGA TTAGCAAAGT TCCAAGTGCA 300
 AAATTACAGT GTGTTAGAGT GTGGGGGGAA AATTAGTCTT ATTTTCCCT ACATGGGATA 360
 CAACACTGTG AATTCAATCT TCAACCTGAA GGGCCCTGCA GTTCCTCCTA AAACATNGTT 420
 GTTTGNTTTT CTTTAACCAA GGTTTAAGCT N 451

40 SEQ ID NO:3114
 SEQUENCE LENGTH:445
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

45 CLONE:HUMGS03680
 SEQUENCE DESCRIPTION:
 GATCTAAGGA TGA CTGGAC AACTCCNTG GCACTGAAGA GTCTGAACAN TGGCCTGTNA 60
 TTGGTCCATT CCAGGACCTT CATTTGCATA AGGTATCAAA CCACANCAGC CTCTGATTGG 120
 CCATGGGCAG ACCTGCACTN TGGCCAATNA TTGGTTCATT CCAGGACATT CATTTGCATA 180
 50 AGGAGTCAAA CCACANCAGT CTTGGATTGG CTGTGAGCCA ATTCACCTCA GTCTCTAATT 240

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GGC>NNGAGT CAGTCTTTCA TTTACATAGG GTGTAACCAT CAAGAAACCT CTACAGGGTA 300
 CTTAAGCCCC AGAAGATTTT NCTACCAGGG CTCTTGAGCN ACTTGCTCTA GCCCACTCCC 360
 ACCCTGTGGA ATGTNCTTTC ANCTTTTGNT TGGTTTCAAG TNCCTTGGTG CTTCCAATAA 420
 5 NTNCCACTTC CTTCAACCACC CNAAA 445

SEQ ID NO:3115
 SEQUENCE LENGTH:439
 SEQUENCE TYPE:nucleic acid
 10 TOPOLOGY:linear
 CLONE:HUMGS03681
 SEQUENCE DESCRIPTION:
 GATCGGGGCC ACTGCTGTCC TGCTGGCTTC NNCTGCGCAG CANGGGGTAC CAAGTGTTTN 60
 15 CCCAGGGAGG CCCCGCGCTG GGACGCCCTT TTAAGGGACC CAGCCTTGAN ACAGCTGCTG 120
 TAAGGGACAG TACTGAAGAC TCTGCAGCCC TCGGNACCCC ACTCGGAGGG TGCCCTCTGC 180
 TCAGGCCTCC CTAGCACCTC CCCCTAACCA AATTNTCCCT GGACCCCAT TCTNAGCTCCC 240
 CATCACCATG GGAGGTGGGG CCTCAATCTA AGGCCTTCCC TGTAAGAAGG GGGTTGTGGC 300
 20 AAAAGCCACA TTACAAGCTG CCATCCCCTC CCCGTTTNG TGGACCTGT GGGCAGGTGC 360
 TTTTCCCTAT CCACAGGGGT GTTTGTGTG TGTGCGCGTG GTGCGGTTN AATAAANGTT 420
 TGTACAACCT NTGTTTAAA 439

SEQ ID NO:3116
 25 SEQUENCE LENGTH:431
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03682
 SEQUENCE DESCRIPTION:
 30 GATCTTGAAG TGCTTTTAT ACAGCTCTCT AATAATTACA AATATCCGAA AGTCATTCT 60
 TGGAACACAA GTGGAGTATG NNAATNNN TATGAATTT TCAGATTATC TAAGCTTGCA 120
 GGTTTTATAA TTAGAAGATA ATGTGAGANT TAATGGGGTT TATATTACA TTATCTCTCA 180
 ACTATGTAGC NCATATTACT CACCCTATGA GTGAATCTGG AATTGCTTT CATGTGAAAT 240
 35 CATTGTGGTC TATGAGTTA CAATACTGCA AACTGTGTTA TTTTATCTAA TCCATTGCTT 300
 AATGAGTGTG TTTTCCATG ATTGAATATA CCGTGGTTCA TATGTTAGCA TGGCAGCATT 360
 TTCAGNTAGC TTTTGGTTT GTTGGGAAGT TGGGGTTTG GGGGGAGGGG GGAGTNTNG 420
 TACGTTGCCT N 431

40 SEQ ID NO:3117
 SEQUENCE LENGTH:427
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 45 CLONE:HUMGS03683
 SEQUENCE DESCRIPTION:
 GATCAAAGTA TTATATGCTG TGTGCTTTTA AGGTGTTTGT AAGTACTGAA AAAGGCAAAA 60
 ATNCTTTCTA CATTGACATT CATTCTATT TNACTGGGCA CCTATGAATG TATGCTGTGT 120
 GCTAGAAATA GACTAAAACA TATTCTATA GCATGNAGT GTGTTTGCAT GTTTGCTGAA 180
 50 AATCCTTTGT GTATAANCCA GTTTGTAAGG TTCTCTGGGT TAGGTAGGGA CTCTGCAGTT 240

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5 TCTNCCTGTC NAAATCTCTC CTACCAAGAT GGTGTTCCAC TGTCCAGCCC AGCATGAGTA 300
GCAGGTAGNG CACAGCTTTA CTGGCTGGTT TGTATGCTTT GGTTTTAGGT GCAATTGTTG 360
TGGGTNGATT TACTTTNTCC AGAAAACCAT NGTATTGNNN ATGTCCTNGG ACCGGTGGAA 420
AATAGGN 427

SEQ ID NO:3118
SEQUENCE LENGTH:423
SEQUENCE TYPE:nucleic acid
10 TOPOLOGY:linear
CLONE:HUMGS03684

SEQUENCE DESCRIPTION:
15 GATCAAAAAT ATTAGAAAAA ATAAAANTAA TACAAATAAA AATACAGTAT AACAGTTATT 60
TAAATAGCAT TTACATTGCA TTAGGTATTA GTCTAGGGAT AAAGTATACA GCGGATGTN 120
CGTTGGTTAT ATACAAATAT GTCATTTTAT GNAANNGACT TGAGTATACT TGGNTTTTNG 180
GTATCTNTGG GTTGGGGGGA CGGTCCAGGA ACCAATACCC CATGGATACC AAGGGACAAC 240
TGTACTTATT TNCCNTTATT GTCATTGCAA GCTTCTTATG GAAACTTTAT AGGGAATGAN 300
AATATACATG TTAAGGANGA TTAACATTA GATAGTAGAT GGTTTGTTGC ATGCTAGAAC 360
20 TGTTAGTATT GTTGATTCAA TTACTTTGGT TTCATGAAAA ANTAAACGGT AANTATCTTT 420
AAA 423

SEQ ID NO:3119
25 SEQUENCE LENGTH:421
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03685

SEQUENCE DESCRIPTION:
30 GATCGAGACC ATCTGGCCA ACATGGTGAA AACTCATCTT TACTAAAATA CAAAAAATTA 60
GCCACGCNTG GTGGCGCAGG TTGTGGTCCC AGCTACTCGG GAGGCTGAGG CAGTGGAGTC 120
ACTTGAACCC GGGAGGCAGA GGTTCAGTG AGCCGAGATT GCACCACTGT ACTCCAGCCT 180
GGCGACAGAG CAAGATTCTN TNTGCCCCC CACCAAAAAA AAAGANTGAA AACTGATAT 240
35 TTGCTACAAC ATGGNTATAC CTCCAAAGCA TCCTGTTAAG TGAAAACAGG GAGACACAGT 300
CACGTACTAT ATGATTGCNC TTACGTGAAA TATCCACANN GACGNNTCCA TGGNGACCAG 360
GCAGATTGCC GNTTGCCAGA GGCCAAGGGT TAGGGAAAAA TTGGTGAGGG ACCCTGCGTG 420
N 421

40 SEQ ID NO:3120
SEQUENCE LENGTH:410
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
45 CLONE:HUMGS03686

SEQUENCE DESCRIPTION:
GATCTATGAC TTCTCAAAGC CGGGTCATGA ATGTCCATAA AATGCTAGGC ATTCCTATTT 60
CCAATATTTT NATGGTTGGA AATAATGCTT CANATTTGGA ACTGGACCCC ATGAAGGATA 120
TTCTATCCT CTCTGCACTG AGGCAGATGC TGCGGGCTGC AGATGATTTT TTAGAAGATT 180
50 TGCCCTCTNGA GGAAACTGGT GCAATTGAGA GAGCGTTACA GCCCTGCATT TGAGATAAGT 240

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TGCCTTGATT CTGACATTG GNCCAGCCTG TACTGGTGTG CCGCAATGAG AGTCAATCTC 300
TATTGACAGC CTGNTTCAGA TTTNNCTTTN GTNCGTTTTN CNTTCTGTCC TTGGACCAGT 360
CATATCTCAN GTTCCAAAGG CCANAACCCT GAGGAGCGGT NNGGCTAAGN 410

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SEQ ID NO:3121
SEQUENCE LENGTH:402
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS03688

SEQUENCE DESCRIPTION:

15

GATCTGAGGA CCCTGTACTG GTTACTCCTG TACACGTTCA CAATTTTCNT GTAAATNTAT 60
TAATATACTG AGCAGTCCAG GAGCAGCCAT TAGGCAAACA CCACTCCTTG CTTCCCTCAT 120
GTGACCTATC ACTGAGCTCA CCAGCTGAGG TCAATNACAT TCTTCCCAAC CTGGAGAACA 180
GAATTTGGGT CTGCTCAGAG GCATGATGTG AAACATGTCT GGGATAAAAG CTTTGTCTA 240
TTGACAGCAA ACCTTTTGTG GTTAAGGGGT AGGGGAAGAG CANGTGAAGG ATGCAGATTA 300
ATTTCTATTT AGGANTATAC TTTNTATAT NGTTTGAAT TTTGGNCTTG TAAAAATATT 360
CATCCATNTT TTNACCAANA NAATTCCTT GTGGACNGGT TN 402

20

SEQ ID NO:3122
SEQUENCE LENGTH:409
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

25

CLONE:HUMGS03689

SEQUENCE DESCRIPTION:

30

GATCAGTTTG ATTCTGTAAT GAGCACAGCA CCTAATATTT TGAGGAGCTC TGTTTTGAGG 60
ACCAATGCTT AAGGTGGACT TTGTTTCGTAA ACAATATCCC AATAGATTG TTGACTTGAG 120
GTCTGGTTTG GTTTTGT TTTTGT TTTTGT TTTTGT TTTTGT TTTTGT TTTTGT TTTTGT 180
ATTCTAATGT TGA AAAACTG CACAAATTTT TATGGGACAA AGCCTAGAAA AGAGAAATGT 240
AGTTTGAATC ATAATCTAAA TCATCGTATG ATAGANGAGG GAAAGTTTG GTGCCATAAT 300
TTCTCCTTTC ACTGGTGTG GGNCTTAAAT CAAGTTGAAA TGTATTTCTG TACCACAATT 360
TTANGGCTTT CAATAAAAAG TTTTAAATNG TCTAGGTGAC CATTCCAAA 409

35

SEQ ID NO:3123
SEQUENCE LENGTH:400
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS03690

SEQUENCE DESCRIPTION:

45

GATCAACATC CACAGCGAGA CCTCCGTGCC CGACCATGTC GTCTGGTCCC TGTTCAACAC 60
CCTCTCTTGG AACTGGTGCT GTCTGGGCTT CATAGCATTG GCCTACTCCG TGAAGTCTAG 120
GGACAGGAAG ATGGTTGGCG ACGTGACCGG GGCCCAAGCC TATGCCTCCA CCGCCAAGTG 180
CCTGAACATC TGGGCCCTGA TTCTGGGCAT CCTCATGACC ATTGGATTCA TCCTGTTACT 240
GGTATTGGGC TCTGTGACAG TCTACCATAT TATGTTACAG ATAATACAGG AAAACGGGG 300
TTACTAGTAG CNGNCCATAG CCTGCAACCT TTTGNACTTC ACTTGTGCAA TGCTTGGCCC 360
TGNACGNTGG GGCTGTTGCC CTTGCCCCNT TTGGTCCTGN 400

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SEQ ID NO:3124

SEQUENCE LENGTH:400

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03691

SEQUENCE DESCRIPTION:

GATCCTTCCT ACITTTGCTTC TNTCCACCCA TGACCTTTTT NACTGTGGCC ATCAGGACTT 60
 TCCCTGACAG CTGTGTACTC TTAGGCTAAG AGATGTGACT ACAGCCTGCC CCTGACTGTG 120
 TTGTCCCAGG GCTGATGNTG TACAGGTACA GGCTGGAGAT TTNACATAG GTTAGATTCT 180
 CATTACGGG GNNGGTTAGC TTTAAGCACC CTAGAGGACT AGGGTAATCT GACTTCTCAC 240
 TTCCTAAGTT CCCTTCTATA TCCTCAAGGT AGAAATGTCT ATGTTTTCTA CTCCAATTCA 300
 TAAATCTATT CATAAGTCTT TTGGTACAAG TTTACCATGN TAAAAAGGAA ATGTGATTTT 360
 GGTCTTCCCC NTCTTTTGCA CTTTTTGGA ATANAGGGTN 400

SEQ ID NO:3125

SEQUENCE LENGTH:397

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03693

SEQUENCE DESCRIPTION:

GATCCTNAAT TTNAAAATTT NACACCATCA TAAATNAACA AAGGTAGGAA GGAGTTTGGC 60
 TTCAATAGCT TACAGTAAAA GGAGTAAAG AGTTCAGCCT CAAAACGATA TTGTTGACCT 120
 GTNATGTTAT GAAAAATAAT CCAGTGTTTA TACTTAACGG ATGCCATCCC TTATNATTTA 180
 CTATTTTCTT AGTCTAACTA AACAATCTTT ATTAAAATAA GCAATGATAT TTGACATGGG 240
 CCTAAGAAAT ATATAGTTAG CTAACAATAT TGTCAGTTAG AGGGATTCT TTTCTAAATT 300
 AAGTACAGAT TTCTTCACCA AACTCCAGGN TAACAGAAAN GGGGCCATAA AATTGGNCC 360
 ATAGTTTCTG GGTAAATAA NTGGTAATTT TAAANTN 397

SEQ ID NO:3126

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03694

SEQUENCE DESCRIPTION:

GATCAAGTAA CATGTTGCAT GTGGCTTACT CTGGATATAT CTAAGCCNT CTGCACATCT 60
 AAACCTAGAT GGAGTTGGTC AAATNAGGGA ACATCTGGNT TATGCCTTTT TNAAGTAGT 120
 TTTNTTTAGG AACTGTCAGC ATGTNGTNGT TGAAGTGTGG AGTTGTAAC NTQCGTGGAC 180
 TATGGACAGT CAACAATATG TACTTAAAAG TTGCACTATT GCAAAACGGG TGTATTATCC 240
 AGGTACTCGT ACACTATTTT TTNGTACTGC TGGTCCTGTA CCAGAAACAT TTNCTTTNAT 300
 NGTNACTNGC TTTTNAAACT TTGTTTAGCC ACTTAAAATC TGCTTATGGC ACAATTNGCC 360
 TCAAANTCCC ATTCCCANGT NGGTAATATT GN 392

SEQ ID NO:3127

SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03695

SEQUENCE DESCRIPTION:

GATCTAAGGA TGA CT TGGAC A CACTCCCTG GCACTGAAGA GTCTGAACAC TGGCCTGTNA 60
 TTGGTCCATT CCAGGACCTT CATTGCATA AGGTATCAAA CCACATCAGC CTCTGATTGG 120
 CCATGGGCCA GACCTGCACT CTGGCCAATN ATTGGTTCAT TCCAGGACAT TCATTGTCAT 180
 AAGGNGTCAA ACCACAGCAG TCTTGGATTG GCTGTGAGCC AATTCACCTC AGTNTCTAAT 240
 TGGCTGTGAG TCAGTCTTTC ATTTACATAG GGTGTAACCA TCAGGAANCC TCTACAGGGT 300
 ACTTAAGCCC CAGGATGATT TTGGCTTACC CGGGNGTTTC TTGNGGCCNC TTTGGTNTTG 360
 GCCNAGTTNC NCACCTTTGT GGAATTGGT N 391

SEQ ID NO:3128

SEQUENCE LENGTH:389

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03696

SEQUENCE DESCRIPTION:

GATCTCGGCT CACTGCAACC TCCACCTCCC GGGTTCAAGC GATTCTCCTN CCTCAGCCTC 60
 CTGAGTATCT GGGATTACAG GCGTGACCA CCATGCCTGG CTAAGTTTG TGT TTTTTT 120
 AGTAGAGATG GGT TTTCAAC ATATTGGTCA GGCTGGTCTC GAACTCCTGA CCTTGTGATA 180
 CACCTGGCCT CAGCCTCCCA AAGGNGNGT GCCACCGCGC CTGGCCCAT TTTCTTTTT 240
 TTGACCCATA CTTAATGTTG CAGAACTAT TCTTGTGATA ACATTATCTC TCATGTACAG 300
 TAATTATATG TAAATTAATT GAAGCAAATN TGGGAACTT TACAATAGAA ATAAAGNTAG 360
 GCAGCCAGCG TGTGTTTCCA NTTNTNAAA 389

SEQ ID NO:3129

SEQUENCE LENGTH:380

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03697

SEQUENCE DESCRIPTION:

GATCTCGGCT CACTGCAACC TCCACCTCCC GGGTTCAAGC ATTTCTCCTG TCTCGGCCTC 60
 CCGAGTAGCT GGGATTACAG GCGTGAGCAC CATGCCAGC CAGAAGTACT ATNATTTCTT 120
 ATAACTACAT ATGAATCTAA AATTATCACA AAAGGAACT TCTTTAAGA AAAAGAAAAG 180
 AATCAGAACA TAAATATACA GCATGGCAAA ACTACATCTA AAACAAGTAT TATAGGTCTC 240
 ATGGTGGAAA ANTTGGACCC ACAAGAAAAG TTGTTAATTA TCTCTGATAT TCTGAACCAT 300
 TGNTATCTGC AAAATGATTA CTAGGTATGT GCAATGANGG CTATTGATGT TACCCTGTAT 360
 ATCTGCACAC TGTGTTCCAN 380

SEQ ID NO:3130

SEQUENCE LENGTH:352

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03698

SEQUENCE DESCRIPTION:

GATCTGCTAG TGCTGTAATA TTGTAAATAC TGGACTCAGG AACTTTTGT AGGAAAAAAT 60
 TGAAGAAGT TAAGTCTCGA ATGTAATTGG AATCTTCACC TCAGAGTGA GTNNNNNCTG 120
 CTATAGCCTA AGCGGCTGTT TACTGCTTTT CATTAGCAGT TGCTCACATG TCTTTGGGTG 180
 GGGGNGNGAN GANGAATTGG CCATCTTAAA AAGCGGGTAA AAAACCTGGG TTAGGGTGTG 240
 TGTTACCTT CAAAATGTTT TATTTAACA CTGGGTCATG TGCATCTGGT GTAGGAAGTT 300
 TTTTCTACCA TAAGTGACAC CAATAAATGT TTGTTATTTA CACTAGTCTA AA 352

SEQ ID NO:3131

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03699

SEQUENCE DESCRIPTION:

GATCGTGGGT TGCCGAGAGG ACCTGAGCGC TCGGGCTCTG CTGAATGGAN CCGGGTCCCT 60
 CAGGCCGTGG ACGCCCTCGG AAGGGGGTGG ACTGTGGCTT GTNTCTGGAC AGGAATGTGT 120
 CATTTCCAC ATCTTCTAGA GGGCTGCCAG CTGGGAAGAC AGTTATNAGG GCAAGCTGTG 180
 CTCTGAGTTT CGGGTTCTGC TCCTACAAAG AACGTGCGGT GCTGCGGGCN AGGGCCCCGG 240
 CACGGACAAG GGCCACTGCA GAGTGTGTTT CTNCTCGTNA GCTGCCCTGG GCANGGAATG 300
 GGCTGGNTNA TGCAGTTGGA TGCACATCTN ATTCTGTCAT GAATGTCCAG TAAAAAATCT 360
 GAAATTGGTT GCAAA 375

SEQ ID NO:3132

SEQUENCE LENGTH:369

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03701

SEQUENCE DESCRIPTION:

GATCCAACCC AAGGGCAAGG GCATCCTGGG AAATACCATC AAGTGGAAT TCACCAAGTN 60
 CCTCATNGAC AAGAACGGCT GCGTGGTGAA GCGCTACGGA CCCATGGAGG AGCCCCCTGGT 120
 GATAGAGAAG NACCTGCCCC ACTATTCTA GCTCCACAAG TGTGTGGNCC CGCCCCGAGCC 180
 CCTGCCACG CCCTTGGAGC CTTCCACCGG CACTCATNAC GGCCTGCCTG CAAACCTGCT 240
 GGTGGGGCAG ACCCGAAAAT CCAGCGTGCA CCGCGCCGGA GGAAGGTCCC ATGGCCTGCT 300
 GGGNTTGGCT CGGCGCNCCT ACCCCTGGCT ACCTTGTGGG AATAAACAGA CAAATTAGCC 360
 TGCTGGAAA 369

SEQ ID NO:3133

SEQUENCE LENGTH:367

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03702

SEQUENCE DESCRIPTION:

GATCTTGGGA AAATTGCGGA GTGTACATTT ACAAAGATGC GTTCAAATAG TGCTCTAAGA 60
 GTTTTGTTC GTGGCTCACT TCGGCTAAAA TGCAGAAATG NATGCTGTCA GCGTTGGTAT 120
 TTCACATTCA ATGGAGCTGA ATGTTACAGGA CCTCTTCCCA TTGAAGCTAT AATTTATTG 180

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5 GACCAAGGAA GCCCTGAAAT GAATTCAACA ATTAATATTC ATCGCACTTC TTCTGTGGAA 240
GGACTTTGTG AAGGAATTGG TGCTGGATTA GTGGATGTTG CTATCTGGGT TGGTACTTGT 300
TCAGATTACC CAAAAGGAGA TGCTTCTACT GGATGGAATT CAGTTTCTCG CATCATTATT 360
TGAAGAN 367

10 SEQ ID NO:3134
SEQUENCE LENGTH:366
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03703
SEQUENCE DESCRIPTION:
15 GATCAAGAAA TGCATTGACA TTCTAATTGA GAAAGAATAT TTGGAGCGAG TGGATGGTGA 60
AAAGGACACC TACAGTTACT TGGCTTAACC CTTCTGGAAG GGTCTGACTG TGTGACCCGC 120
AGCAAATAGT TCATGTTGGA AAGAAATGAAA ACAACTCAAG TTCATAGCAG CCAGCCTGCC 180
GCCATTGGAC CTCCCTTTTA AAAACTGAGA CCAAGACTCC CATCAGCTGG TCTCGGGTTT 240
ACATCGGAAC TGCTCAGGAT TGATACATTT NAAGTCTGTA AATACGGACA CCAACGCCAT 300
20 TTACCCTAAT TTNANGAACA GCGGGGNCCTG TCCNTCCGGT GCCGAGGGGC TTGCATTGCT 360
TACCGN 366

25 SEQ ID NO:3135
SEQUENCE LENGTH:364
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03704
SEQUENCE DESCRIPTION:
30 GATCCCTGAT TAAGCTGATG ACTAGACCTA CAATTAATTT TCCTGCAGTA TATGAAGTAT 60
TGTACCAGAG TATTAAGAAGA TATGTAATAT TTNATTGATA AATCTATCCT TTAAGAAGAA 120
TACGTTTTAG GATGTCATCA TTTTGATGTG AATCATGTAA ATGTTGATAA TATGCTGTTT 180
ATTATACATT TAGTGTTTCA AGAGATTAC TTAATTGCCT TTTTGCCAC GTATATTATG 240
TAGTCTATTT GCAACTGTTC TTAAGAAANT GNCATTAAAG GACTAGTTTA TGTNGGGAAC 300
35 CATTAGTGGN TGTTATTNGN CTCCCCCCT NTNTTTTGG GGTGTTAGCG CACCTGCTTT 360
GCTN 364

40 SEQ ID NO:3136
SEQUENCE LENGTH:363
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03705
SEQUENCE DESCRIPTION:
45 GATCCTGACC AGCAAGCCCC CCCCAGCCC CCCTTCCAAG TGACTCCGTG NCTTGAGTGT 60
GTCTGCGTGT TTACACCCGT CCTCTGCTG GCCGCCCCCG TGCGAGCGGC ACCCCTGCCC 120
TGCCCTCCAC AGAATTGGGT TCCAAGGGCT GTTCCAGACA ACTGCCAACG TCACTGAGGG 180
CCCTGCCCCA GCGGNCCTGG CCCCAGGCTC TATTAACCTA AAATGTAGCT CCCTAGCGNT 240
50 AACCTAGGAA CCGGCGTGN CTGCTGGGG GGTACGCCC TCATGNCCTT GTTCCCAGGG 300
CCGGGGGCCT TNAAGCGTT NGAACAATTC NTTGGCTTTT TTTCANANTG TTTAATNGGA 360

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ATN

363

SEQ ID NO:3137

SEQUENCE LENGTH:359

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03707

SEQUENCE DESCRIPTION:

5 GATCTGGTGG TCAGCCCTAG GATAAAAAGC CAGGGCTGGA GAACAAGAAA GGGCCAGGAG 60
 ATGGAATTCC TTCAGGCCGG CACCCACACC CTAGGACATG TAAGCCCTCA TGTCCAAGGG 120
 AGCCTCATGC AGATAGTAGG AAATCAGGTC TGGAAATTTA AAAATAAAG GCATGAGACT 180
 AAGGCTATCT GCTTCNTTA TGGCCTGACT GGAGAGGGGA GGGTGGAGAG GCANGGCCCA 240
 15 CAGTGGGCAT CCCNGCTNGG TCTTNGGATG NCTGCNGTGN GGTGAATTCC CGGGAAGTNG 300
 TTTTGGCACA ANGNTNNTT TTGGCACTTT GTTTTTTTG GTATTAAAG GTTTTGCTN 359

SEQ ID NO:3138

SEQUENCE LENGTH:358

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03708

SEQUENCE DESCRIPTION:

25 GATCAGGGGA TAGTGAAGTT TACCAACTGG GTGATGTCAG TCAAAGACA ACATGGCACA 60
 GAATATCAGT ATTCCGGCCA GGCCTCAGAG ACGTGGCATA TCAATATGTG AAAAAGGGGT 120
 CTCGAATTTA TTTGGAAGGG AAAATAGACT ATGGTGAATA CATGGATAAA AATAATGTGA 180
 GCGGACAAGC AACAACAATC ATAGCTGATA ATATTATATT TCTGAGTGAC CAGACGNAAG 240
 30 AGAAGGAGTA GAAAGGATGA TTCTTCTTTG GCCATCATTT GGTACAGTCT CATTCCAAG 300
 TCATGTATAA TCTTTATGGC TTCCAGGGAC ANGGNTTAA AATACTCTTT TACGTAAA 358

SEQ ID NO:3139

SEQUENCE LENGTH:356

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03709

SEQUENCE DESCRIPTION:

40 GATCTCAGTC TCTCTGTCTC TCTTTCTCTC CTTTTCCTTT TGGTGTATCA AATATTTNAT 60
 TGACAAAGTA AGGGCCTTGA TTAGGACCAA ATTCTCGTGT GTTGCTATGG TCTTTATTTA 120
 GGACAACAAT TAACAATGCA GTGGCCCATC CTTGTCACCT TACACATATG ACTATACGGG 180
 ACATATGTAA TATATAAATA TATATATAAA NCATTCCCCT CTGTCCCCTT GGCTTCGGAT 240
 GGAGGCCTTT CTGTTGAGCT GAAATGCACC TGCAGCTGGG TGCTGCCAGC AGCTTGCAGG 300
 45 CCCCAGCCCT GTTCCANTCA ATGCAGTTGN CAATAANTGG NATGAGTATC GTCAAA 356

SEQ ID NO:3140

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03710

SEQUENCE DESCRIPTION:

5 GATCTTCAGC ATGTGCGGCC TCATGCTTAA GCTGAAGTGG TGTGCTTGGG TCGCTGTCTA 60
 CTGCTCCTTC ATCAGCTTTG CCAACTCTCG GAGCTCGGAG GACACGAAGC AAATAATGAG 120
 TAGCTTCATG CTGTCCATCT CTGCCGTGGT GATGTCCTAT CTGCAGAATC CTCAGCCCAT 180
 GACGCCCCCA TGGTGATACC AGCCTAGAAG GGTCACATT TGGACCCGTG CTATCCACTA 240
 GGCCTGGGCT TTGGCTGCTA AACCTGCTGC CTTAGCTGC CATCCTGGAC TTCCCTGAAT 300
 10 NAGGCCGTCT CGGTGCCCC AGCTGGGATA GAGGGAACCT GGCCCTTTT NCTN 354

SEQ ID NO:3141

SEQUENCE LENGTH:352

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS03711

SEQUENCE DESCRIPTION:

20 GATCTTGATG AGGGCCAACT TTCCCTCTTC CACAAGGGAT TAATCTTAGA ACTATAGCCA 60
 ATTTATTATA AGTACTATTT AGCTACTCTG TGCTCCACAC ATCACGGAGT AATATCTTCA 120
 AACTATGAGG TTTAGTAACA CTTGACTGCT GAGGTTTATT TCCTCAGCTC TGATGCTTCC 180
 TGGGTGAAGA TGTAAGTNAT TAAATTAAGT CAAATTTTAA AGCTAACACT TCATTCCATC 240
 TAGACCAGGT AGCTCGTCAT TTGTACGTCT GATAGGTGCT TCAACATCTC AGAATTGGCT 300
 TTATTTTCA TGCATTGCAT ATTGTACTCN TTTGTAATAT TGGGNATGTA AN 352

25 SEQ ID NO:3142

SEQUENCE LENGTH:349

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS03712

SEQUENCE DESCRIPTION:

35 GATCTGACCA CTGTTCTCCA GCAGGCCTCT GCTGCAGCTT TTNCTCTCAG TGTTCCTGGCC 60
 CTCTCTCTC TTGAAAGTTC TCTGCTTACT TTGGTTTCC CTCTGCTTGT AAAACATTGA 120
 GTCCCTCCC TGCCTTGGTT AATTGACTCA CACCAGCTGT GCGATGCCCG CTTTACAAT 180
 TAAAGGAAAA CTGTTTGTGTT CAGTGTCAAC TTGTCAGCAA CACTGTGTCC CTTGCCCCA 240
 CCGTTCTTCT CTGCTGCATT TGGACATGAG CCAAATTGA ACCCAATCAA ATATAACGTG 300
 TCTGACACTG ATTTGTNTT TACTCAANTA AANGTATAGA CTACAGAAA 349

40 SEQ ID NO:3143

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03713

SEQUENCE DESCRIPTION:

50 GATCTGTTCC AGCTGCAGGT GAACACCCTA CGACGTTATA AACGACACTA ACAAGTTGCA 60
 GACCAGACCA GGCTTCAATA AGGCCAGTT AGCAGAACT GTGAGTCGAC ACTTCAGGAA 120
 CATACCTGTG AATGAAAAAG AGACCCCTGC TACTTTCATC TACATGGTGA AGAGTAACAA 180
 GAGTAGACTG GACCAGAAAT CGGAGGGNGG CAAGCAGCTT NAGTGAGGAT GAAGCACATC 240

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TTAAAGGAAT GAAGTGTAAT TGCTTGATGC ACAGGTNGAT ATCTACTACA TTTAAGCCCA 300
TAAAGACTGT TTAATATTA TTGTAAATAA AAAAGTTTGT ATGATTGN 348

5 SEQ ID NO:3144
SEQUENCE LENGTH:348
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
10 CLONE:HUMGS03714

SEQUENCE DESCRIPTION:
GATCCAGATG CAGAGGCCAG GATGTGGGCC CAGCCCTGTG CCAGGAGGCT NGCTGGAATA 60
AAGGGATGGG CAGGCTGGCA TGGGGGCAGC CGCTGCCCT GCCTNNNTGT TGCTGTGTAT 120
TCCTGCCGGC CAGGGGCCAC TGCCAGGACC ACGCTCCCT TTNATATCC CGATTCTTAA 180
15 GTTCTGCTAT TGTGGTATTC TGGTGGAGAA AAAAGAACCG CGTGGCTGTT TTTNAACTGC 240
CTGGAACCTA AGACCCTGAA TTCTTTTCCC CCCCAAGGGG AAAATCTATA TGGAAANCAT 300
TTATTTTAAA ATACAGGATG AAGTGAATTA AAAGATTTTA AATGCAAA 348

20 SEQ ID NO:3145
SEQUENCE LENGTH:379
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03715

25 SEQUENCE DESCRIPTION:
GATCACACCT GAGCTTATGC TAAAAGGTGG GATGACTCAG AGCTGGGGCT GGTCAACAGA 60
CAGACTGACC ATGTGATTAG AGGTTTGAGG CTTTGAGTCA GCCTGACCTA TGGGGCGGGG 120
GACTGGAGGC TGAGTTTAAT CATCTGGCCA GTGCTTTAAT CAGTACATCA TGAAACCCTA 180
30 ATAAAACTC TGGACACTAA AGCTCAGCAT AGCTTCCTGG GTGGTGAAGC TGTGGCTATG 240
CCGGCAGGGC AGTGTGCCCT AATTCCACGA AGAGGGGGCA TGGGAGCACT GTGCTCAAGA 300
CCCTTCCAGA CCTTCCCTG TGTCTTCCTT GGCTTGTGA GCTGATTTGT ATCCTTTATA 360
ATAAACCTAA TCATAAGGN 379

35 SEQ ID NO:3146
SEQUENCE LENGTH:371
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03716

40 SEQUENCE DESCRIPTION:
GATCTGACCT GTGACAAGTC TGTACTATCC ACTATGTAAA TGGCTCACAA GTCAATTGCA 60
AACAACTGA ATGTACAAAT CTTAGTGCTG GTGCTGAAAT CTCTTCAGAA TAGTNATCAT 120
GATTTAAAAG TTTGTTTTAA AATTTGCAAG CATCAAGTGT CAATCAAAAC TGAAGATGAA 180
45 ACACATAATGA ATGTTGAATT CTCATGCTTT TAGGTGTACT TCCTTTTTAG AATTTTCAGT 240
TTTCTGCTAT TTTTACCGTA ACTATTTCTG TTAANTTTGG TTTCAATTAN GTTTCCTACA 300
TGCTAACTTC GTTTGTGCGN TTGANTAAAN TTGCCGGTAT ATATNTGGTG GCCTTGTTTG 360
TGACACTTTG N 371

50 SEQ ID NO:3147

55

SEQUENCE LENGTH:346

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03717

SEQUENCE DESCRIPTION:

GATCACAGGC AAACCCATCA AGCTGACTCA GGTGGAACAC GAAGCTGGCA NNTAAGTGGA 60
 ACATGGATGG GGCAGGAACC ACCCCAGCC CAGGGCTGCA GCCTNNCCA CCTNACCTTC 120
 CCGCTGGACT ATNACCTTAA CCAGCCTTTN ATCTTCGTAC TGAGGGACAC AGACACAGGG 180
 GCCCTTCTTT TCATTGGCAA GATTCTGGAC CCCAGGGGCC CCTAATATCC CAGTTTAATA 240
 TTCCAATACC CTAGAAGAAA ACCCGAGGGA CAGCAGATTC CACAGGACAC GAAGGCTTGC 300
 CCCTGTAAGG TTTCAATGCA TACANTAAA GAGCTTTATC CCTAAA 346

SEQ ID NO:3148

SEQUENCE LENGTH:344

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03718

SEQUENCE DESCRIPTION:

GATCTNCTGC CGAGTGAATG GGGAAAGTNT CCAGAGCGGC AACACCAAAT AGATGGTATT 60
 CAAGACAGAG GACCTGATAG CCTGGGTCTC CCAGTTTNTN ACCTTNACC CAGGGGATGT 120
 NATCCTAACT GGGACCCCCC CAGGTGTCTG TGTATTCAGG AAACCTCCTG TTTTNTCAA 180
 GAAGGGGGAT GAAGTCCAGT GTGAGATTGA NGAAGTAGGT GTNATCATCA ACAAGGTGGT 240
 GTGATGGCTC CTGCACAGGC CCTGCACATA GGTTGAGGGC ATCTGCTCCC ACTNAGCCTA 300
 GCCCAGGGAA AGGCCANTG ACAGGNTGTG GACAGGTTGC CAGN 344

SEQ ID NO:3149

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03719

SEQUENCE DESCRIPTION:

GATCTTTGAA GTCTATTTAA ATATTCATTC CATTACATCT AGACTCACCN AGAACTACAT 60
 GTTATGATGT TAAGTTGAAG TTGAAACATG ATGTTTTGCA TTAAATTTAA GATATGCAAA 120
 TTTATGTAGA GAAAATAAAT GTTATATACC CTATAATCTT TCACCTAATT AGTATTTAAT 180
 TATATGGATT TGNNTTATAT TATAAAAGAT GTTTGTATTT TGTCTNTNGA TATTGNCAAA 240
 ATTGTTTGA TATNCTTATG TTCTCAAGTC TGTATCTGCC TCCCCTGCCT TATNCTNAT 300
 GTTTTGCCAC AGTTAACCCA TTGTGCTTCT TTGTAATCAA N 341

SEQ ID NO:3150

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03720

SEQUENCE DESCRIPTION:

GATCTNATCA GTCCTAAGCG GGTCATGGGG CAACACGGTT AGCGGGGAGA GCACGGGGTA 60

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5 GCGGAGAAG GGCCTCTGGA GCAGGTCTGG AGGGGCCATG GGGCAGTCCT GGGTGTGGGG 120
 ACACAGTCGG GTTGACCCAG GGCTGTCTCC CTCCANAGCC TCCCTCCGGA CAATAAGTCC 180
 CCCCTCTTGT NTCCACCCCT NAGATTGGGC ATGGGGTGCG GTGTGGGGGG CATGTNCTGC 240
 CTGTTGTNAT GGGTTTTTTT TCGGGGGGGG NTTGCTTTT TNTGGGTCT TTGAGCTCCA 300
 AAAATAAAC ACTTCCTTN AGGGAGAGCA CACCTTAA 339

10 SEQ ID NO:3151
 SEQUENCE LENGTH:337
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03721

15 SEQUENCE DESCRIPTION:
 GATCCTCTCC CTGGGATAAG CACTCCCAGC CCCGTTTATC AGAAACACAG GCAAGGAAAT 60
 TGGAACGCC ACCCAGCCCA GCATGATGGC TCAATTGGTT GGTTCGTTG TNAGTTGTCT 120
 CTNGTTTTG TTAAGNNTT TAATAAGTA CGTTTTCAT AATTGCCTT AAATGGTTG 180
 TAATATTGT AACGGTTTGA GCAGCCTATA ACTTTTCAGC TGGTGCTTT ACTTAGGGNA 240
 20 AAAACAATT TGTAATACA GNACATTGT TAAAGGCAT AACNTAGAA CATAGCTTCC 300
 TGTTTGTGG ATTTGGTTT CTNTATATTC AAAGTAN 337

25 SEQ ID NO:3152
 SEQUENCE LENGTH:336
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03722

30 SEQUENCE DESCRIPTION:
 GATCAGAGGC AGACAATGAC GAGTGAAGAT GGTGTAAAG CCCTCTTCAT TCCTGGAGGA 60
 GCCTGCATCT AATCTNTAG GCCCTCTTTC TCTGTGGGTC TCATGAACAG CAGTGGGGAC 120
 CATTGAGNAC TTGAATGGCC TGTGTNTA TGGGCTTGCA AAGGACAAGC AGAGTTCACA 180
 GAGCTCAGGA TAGAAATC AGAGCCTCCT CCACGGGCTT CAGTGNAACT CCGATGAACT 240
 GTACCTGAGG GAATTTTTT NTAATCAAC CCCTGTGTG GATGAATACA GGACCACAAA 300
 35 ANTNGTNTA CGTTGAAAA AAAANAANNT NTNNNN 336

40 SEQ ID NO:3153
 SEQUENCE LENGTH:334
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03723

45 SEQUENCE DESCRIPTION:
 GATCTGCATT CCGACTGCCT ATNAACGGT GTGGGGGCCG GGGCTGGAN TTGCTGAAGT 60
 NTTCAACTTG CACTCGGAGC TCCTTTNATA CCTCAAAGCT GGCTGTNAGG TGGCAGCTCA 120
 CACCCAGACT CACTGGCCAC ACCTCAGCAG GGGGGGAGTC GAGTGTCAGT NTCTTTCTGT 180
 GAAGGCTTTT TTTTCTTTT GGCCTGGGAA TTTTCCCAT TTTAATGAAG GGGTTTAAA 240
 TTGTTTCATT TTGTGTGCTG TGCTTCAAAG CCTTAAGTGT CAAATCTGC ATTATCTNGT 300
 50 TTGTACAGAA ATATACTGGC CTAGCAGNGG CAAA 334

55

EP 0 679 716 A1

SEQ ID NO:3154
 SEQUENCE LENGTH:330
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03724
 SEQUENCE DESCRIPTION:
 GATCAAAATT TGTGTAATTG CAGGGCTTTC TTTCTTTTNN TTCAAATTTA CAAGGGTTCA 60
 TTTTGGAAAC TACATTTTAA ACTTTGGAAT CAAATTGTTT CTTATTTGGG AGGATAATGT 120
 ATATACATTG GTATTATGTT AAATAATAAA ATTGTNCTAA TTTGGTGCCA TTTCCTGAAT 180
 CACAACGTGA TTTTGNATC TCANGCTATT TTCATATGTN ATGTGTCAAT GTATCATCTC 240
 TCAGAAAGGT TTTACANTCC AAACATTATA TGTNCTCTGT GTAAGTGAAT TTNACTTATC 300
 TTTNTAAAC CAGNAACATT AATTGAGAAA 330

SEQ ID NO:3155
 SEQUENCE LENGTH:330
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03725
 SEQUENCE DESCRIPTION:
 GATCTTCGCA AGCCAGCTTC TTCTGCATCT NAGGGGCTGC TGGCGCCCAN AGGAGGCAGA 60
 CAGATGTCTN NTAGCTGAGT TTCTAACCGC ATGATGAGAC TCAGACCTTC CGCTGCACTA 120
 GAAAATCTGC AACAGTGTCC CTGAGTCACT TCTCCTTAGT GGGCAGACTC GTGTTAGATT 180
 TGTGGAACCC AGCTCTCTGA TTTACTCCTT TTGGAAAACC CATGGAATTT CATGTATAAG 240
 GCTTTCATTT GTATTTNAAG GTTTTCTGT TTGTTTGTAG TATATACATG GTGCTCAATA 300
 GCAACATCTT AGCAGATGAA GCAGTTTATN 330

SEQ ID NO:3156
 SEQUENCE LENGTH:329
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03726
 SEQUENCE DESCRIPTION:
 GATCTACTGC AAATCCTGCT ACGGAAAGAA GTATGGGCCA AAAGGCTACG GTTATNGCCA 60
 GGGCGCTGNC ACGCTTAACA TGGACCGTGG CGAGAGGCTG GGCATCAAAC CAGAGAGTGT 120
 TCAGCCTNNA CAGGCCTACA ACAAATCCAA ACACTTCTAA ATTTNCTCAG AAATATGGAG 180
 GTGCNGNGAA GTGTTCCAGG NGTGGGGATT CTGTATATNC TGCCGAGANG ATAATTGGAG 240
 CTGGAAGCC CTGGCACAAA ANCTGTTTCC GATGTGCAAA GTGTGGGAAG AGTCTTGANT 300
 CAACANCTCT GACTGNAAAN AGAAGGTGN 329

SEQ ID NO:3157
 SEQUENCE LENGTH:329
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03727
 SEQUENCE DESCRIPTION:

EP 0 679 716 A1

5 GATCGGGCGC ACGGNCCGCT TTGGCAAGAG GGGCCTGGCA GTGAACATNN TGGACAGCAA 60
GCACAGCATG ANCATCCTGA ACAGAATCCA GGAGCATT TT AATAAGAAGA TAGAAAGATT 120
GGACACAGAT GATTTGGACG AGATTGAGAA ANTAGCCAAC TGAGAAGCTC CACCAGCCAC 180
TGATGCCAGC CCTGGCACTG CCCCTGCACA GGAGACAAGT GCGTTCAGGG CACAGGCCCC 240
GACATCACCC CAAGGNCAAC GGCACAAGTA GAGAGANACT ACCTACCTCA NTTCANATTA 300
TGTTTGGCCT TGACAAAATT GTATGCAAN 329

10 SEQ ID NO:3158
SEQUENCE LENGTH:327
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03728

15 SEQUENCE DESCRIPTION:
GATCAAATTT ACTNGAACAA TTGTTAATTT ATCCATTGTG CTTAGCTTTG TGACACAGCC 60
AAAAGTTACC TATTTAATCT TTTCAATAAA AATTGTTNTT TGAAATCCAG AAATNATTTA 120
AAAAGAGGTC AGGTTTTTAA CTATTTATTG AAGTATGTGG ATGTACAGTA TTTCAATAGA 180
20 TATGAATATG AATAAATGGT ATGCCTTAAG ATTCTTTGAA TATGTATTTA CTTTAAAGAC 240
TGGA AAAAGC TCTTCCTGTC TTTTAGTAAA NCATCCATAT TTCATAACCT TATGTAAAAT 300
ATGTNGTNCC TGTTCCTAAT AGGTGAN 327

25 SEQ ID NO:3159
SEQUENCE LENGTH:324
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03729

30 SEQUENCE DESCRIPTION:
GATCTGAATT TGGACCATT CACTAAAGAG AACATGAGTT TGCTCAGCCC TTTCTCACA 60
AGAGGGAGGG CCCCGGTTCC CCAGACTTCT CCACGCGCTG GCTCCATAAA GGCCAGCTTT 120
GGCCAGGCTG CCACAGGGGC CTNAGGAGCT CACTCTGGGC CTACCTGGTT TCAGTTAGAG 180
GGTCTCCTG TATTTTTTCC ATTTAAAAAG TATGTCCTCA GAAAACTGTA NTGGAAGGAT 240
35 GGGTGGCAGG AACTTGTATA GTTCAGCTTC CAACACTTTG GAACAGATTA AAAAGGGAAT 300
CTTTTAAATA AAAACGTATA NAAA 324

40 SEQ ID NO:3160
SEQUENCE LENGTH:322
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03730

45 SEQUENCE DESCRIPTION:
GATCTTGGTT TTAATTAAC TATTACTCTA TTAATATAAC CTTGGAATTC TATTCTAATN 60
ATGTTGTCTT GGCTGCTTGT AGTATCAGTT CGCCCTCTT GTTAGGGAGA TATGTAACAA 120
TCTGTCATTT AATTGAGCAG TCTTTTTCAC ATAACAGTAA TAGCAAAAAT CCTACCTACT 180
CAGAATCATC TNCTTAGGTT GTCTCCTAAA TCTGAACAAT ACAGTTGTTT TATAAANTNN 240
50 CATTTNGTCT CTTGAGATTN AATCAATTAG AACTCTTTAG GGAGAAAATA AATANTAGAN 300
GAAANTATAT GCCTCANATT GN 322

55

SEQ ID NO:3161
SEQUENCE LENGTH:320
SEQUENCE TYPE:nucleic acid
5 TOPOLOGY:linear
CLONE:HUMGS03731
SEQUENCE DESCRIPTION:
GATCTGACTT TTTTCCTTCT CAAAAGAATC ATACTTGGGA TTACAGGTAC ATTTNATGTT 60
ATATNATGGA TAAGTGAAAA NTTTTTAAAG GAGATTTTAT ACCTTTTCAC ATTAAAAAAG 120
10 GTATTATAT TATNACTTTG TAGTGATTGT CTTAAGAAAA AATATAGCCC AAATGTATAG 180
TAAATCAGC AGCTCAAGAA GAATTTCTGC TTCTNITTGT AGTTGATGCT TTGTTTTTNC 240
CTGCAGTCAG AAATTCCTTG TATTTGTCAA ATGTATAATC AGCTTGATT GTTTTAAAT 300
TAAANAAAA TTTGANTAAA 320

SEQ ID NO:3162
SEQUENCE LENGTH:320
SEQUENCE TYPE:nucleic acid
20 TOPOLOGY:linear
CLONE:HUMGS03732
SEQUENCE DESCRIPTION:
GATCTGAAAA NAAACCTTAA TACGCTCATA TGGTTGGAGT GTTAAGTGAA CCTNTGATT 60
TTNAGGGTT TTTNTACGTG TAGGCGTGAA TAGGGGGCAC CCCTTCAAAA CTGTACAAAG 120
25 AAGACGACTG TTTTCATTT CCATTTAAAC ATTTTtagcc ACTTCATTTC TATTATTGA 180
ACAGGTCAA TTTGTNTTGT TATTTGTGAG TACAGTACAT TAAAAAACA TCCTATCGG 240
TTATTTTTTT TTCAGTCGGA GTTTGACGTA TAAATNGITT ATGCTTTTGG TGTAATCTCT 300
TAATAAACTG GTTCTTCAA 320

SEQ ID NO:3163
SEQUENCE LENGTH:180
SEQUENCE TYPE:nucleic acid
30 TOPOLOGY:linear
CLONE:HUMGS03733
SEQUENCE DESCRIPTION:
GATCAGCTAG CTTGATTCTT GTGTACTTTT TTNAACTGT GGGTTTTTCCT AGTAAATTTA 60
ATTACAGAA ATNAATGGTA GCATTTAGTA ATCTACAAAG GAAATATCAA AGTNTTTTNN 120
40 AAGCCTGTNA TATTCAGTGT GTGCCACAGG ATTGAAATAA ATGACAATGT AATTATGAAA 180

SEQ ID NO:3164
SEQUENCE LENGTH:303
SEQUENCE TYPE:nucleic acid
45 TOPOLOGY:linear
CLONE:HUMGS03734
SEQUENCE DESCRIPTION:
GATCAGAATT CCGATTTGAC GGGCAACCAA TCAATGAAAC AGACACACCT GCACAGTTGG 60
50 AAATGGAGGA TGAAGATACA ATTGATGTGT TCCAACAGCA GACGGGAGGT GTCTACTGAA 120

EP 0 679 716 A1

5 AAGGGAACCT GCTTCTTTAC TCCAGAACTC TGTTCCTTAA AGACCAAGAT TACATTCTCA 180
ATTAGAAAAC TGCAATTTGG TTCCACCACA TCCTGACTAC TACCGTATAG TTTTCTCTAT 240
TCTTTCATTT CCCCCTTCCC CATTCCCTTA TTGTACATAA AGTAACTGGT ATATGTGCAC 300
AAA 303

10 SEQ ID NO:3165
SEQUENCE LENGTH:311
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03736
SEQUENCE DESCRIPTION:
15 GATCTAGAGC CAGGCTGGTC AAGACAAGAA TTGGCTGGAA TAGGCTGCTC TTCCCCCATT 60
CCATCATGTG CTGTCCCCAC CCCTTTGGCC ACCTGGGCTG ACTGTGTCTT AATACCTCAA 120
GTGCAAGTAT ATAGGAGTAA GAAATNAACA ATGCCTGCCT CCTTATACTC ATGCCTACAT 180
TGTATGACAT CTAGTATGAA AGGGAAACAT TAAAGGAAAA CCCTTGTTTT GCTCTAAAAC 240
CTGAGGACGG TAAACACTGA GAGTAACCTG GTGCTTGGTT TGAAGTAAAA CACAAATACT 300
TCCCTTTTAA A 311
20

25 SEQ ID NO:3166
SEQUENCE LENGTH:309
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03737
SEQUENCE DESCRIPTION:
30 GATCAAGGGC AATGCCAATG AACATCGGCA TGGATTATAA TTATGCCCTC CTGGAACCTCA 60
AAAAGCCCCA CAAGAGAAAA TTTATGAAGA TTGGGGTGAG CCCTCCTGCT AAGCAGCTGC 120
CAGGGGGCAG AATCACTTC TCTGGTTATN ACAATNCCN NCCAGGCAAT TTGGTGTATC 180
GCTTCTGTGA CGTCAAAGAC GAGACCTATG ACTTGCTCTA CCAGCAATGC GATGCCCAGC 240
CAGGGGCCAG CGGGTCTGGG GTCTATGTGA GGATGTGGAA GAGACAGCAG CAGAAGTGGG 300
AGCGAAAAAN 309
35

40 SEQ ID NO:3167
SEQUENCE LENGTH:309
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03738
SEQUENCE DESCRIPTION:
45 GATCTTGATA TGTTTAAACA TTATCATGGC AGGGAAATAT ATAAAGAAGA AAAATATTTT 60
NACATTAAAC CTTTCTAAA ANTTGTAAAT AGAAAAATAA TTTGGTTTTT NATCAAGANC 120
AACACTTATC GTTATGTATT GTGTTAGTTA TATTGCCAGT CTGTTGCGAC TGA CTCAAAA 180
AGTTAAATGT TGCCACTGCT GANGATGATT ATGNGCATCG CANACTTTGT TTCTGNCCCA 240
TTTGGCAGT TTTNATATAC TCCNTTAAGA TGTGAATGT TACAGGTTAN TAAAGTTAAT 300
ACCTTTAAA 309
50

55 SEQ ID NO:3168

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03739

SEQUENCE DESCRIPTION:

GATCCTTTAC AGAAAAAGTT TTCTGACCTC AATTCTAAAG TAATTGTAGT AGGGAGCTGG 60
 AGGACTTTCT TTCCCTTTAT GGTAATTTT TGAGCTACAA AAGAGCCTTG CAGAAATGGG 120
 TGAAGGGATT AANCTTTTAA AAATAAATGC TATATATTAG GAAAATAAAA AATATTTTAG 180
 AGCCAAGTTA ACAAGTACTT CAGCAAAACA TGCTAGTTT ATGCAGGGGA TTCTGTATTC 240
 CAAATGGATA CANTCCGACA TATATAAAG AATCAGATTC TTAATATTG ACTCTTATTT 300
 NGCAAN 306

SEQ ID NO:3169

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03740

SEQUENCE DESCRIPTION:

GATCATACCC AGAATTCAAT GTTTGATATT TTAAGAATGT ATGTTCTAGT GTTTTTNAGA 60
 GTGAGTCTAC CATCTGTATA AAAACACCTT GGGGGCAGGC AGGGGCATTT AAAAATGTAG 120
 GACCTATCGT CCAGACTCAC AGAGTGGGGC TCCAGAATCT CCATTTTAA CAACTCTCT 180
 TAAGTAATTC TGATGTGTAC CAAAATCAGT GCCATTGGTG TGTGTGTACG TAACTATATA 240
 CATATGTGTG TGTGTGTATA TATATAATGT GTCATAACCG TAAACAATAA ACAATATCAA 300
 GNTAAA 306

SEQ ID NO:3170

SEQUENCE LENGTH:306

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03741

SEQUENCE DESCRIPTION:

GATCTGTCAT GTTTAAACCC CCTACTTCTA AGGGAACCTC TCTAATCTCT TATCCTCATC 60
 CCCAAATAGT GTTTTCTTCC TCTGGGTCT TATAATNTTG GTATCAATCT CACAGCATTT 120
 AGTGCTTCT GCCTGGTGTG ACAGTTACCT GTGTGCATGT GCAATTTCTA ATTTCCACG 180
 CTAGACTGTG AGCTTCCTAA GGCAAGAATC ATGCCTTGTT GGTTTCTGTA TTCCTCATGG 240
 TGCCAAACAC AGTGCTTCT ACATTGCAGG CGCTGAATAA ACATTTTAA AGCAAAAAAA 300
 TTNAAA 306

SEQ ID NO:3171

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03742

SEQUENCE DESCRIPTION:

GATCTCCAGT GGTCAAAAGA CATTTACCCT TAATATCAGA CAACATTTAT ATTTTAGTGA 60

AGAAACAAGT TCTCGGGTGG GGAATCTATG TTCTACTCAG ATTTATATGT TTGGAGGAAA 120
AAAGCCTTTT TTGTAAAT ATTTAAATTT ATATANGAAA ATGTTAGAAA AAAATATGGG 180
GGAGTGTATT ATAAANCCTG CTTTATTTGC CATGGGGCCN GGGGGAGGCC NGGCCTAATA 240
CTCCTAAAGT ANGTGTTNGG GNCNTNTTT TCTCCAATC CACCTGGTGC TGTTCNTGT 300
AANGN 305

SEQ ID NO:3172
SEQUENCE LENGTH:303
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03743

SEQUENCE DESCRIPTION:
GATCTCCGGG AGGACAGAT GGCCAATNTC TCCCCTTCCA AAGCAGGCC TGCTCCCCGG 60
GCAGCCTCCC GCCGAGGGG CCAGCCCCA ACCACAGGC AGGGAGGGG ATCCCTCCCT 120
GCGGACCTCA GGGAGCGAAC GTGGATGAAA ACCACAGGA TTCCGGACGC CAGACCCCAT 180
TTNATACTTC ACTTTTCTCT ACAGTGTGT TTTGTTGTTG TTGGTTTNA TTTTNATAC 240
TTTGGCCATA CCACAGAGCT AGATTGCCA GGTCTGGGCT GAATAAACA AGGNTTTTCT 300
AAA 303

SEQ ID NO:3173
SEQUENCE LENGTH:306
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03744

SEQUENCE DESCRIPTION:
GATCACTTTT GAGCTCTGAA GCTTTGAATC ATTCAGTGGT GGAGATGGCC TTCTGGTAAC 60
TGAATATTAC CTTCTGTAGG AAAAGGTGGA AAATAAGCAT CTAGAAGGTT GTTGTGAATG 120
ACTCTGTGCT GGCAAAAATG CTTGAAACCT CTATATTCT TTCGTTTATA AGAGGTAAAG 180
GTCAAATTTT TCAACAAAAG TCTTTAATA ACAAAGCAT GCAGTTCTCT GTGAAATCTC 240
AAATATTGTT GTAATAGTCT GTTTCAATCT TAAANGAAT CAGTAAAGC AAACAAGGGG 300
TTTAAA 306

SEQ ID NO:3174
SEQUENCE LENGTH:301
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03745

SEQUENCE DESCRIPTION:
GATCAGCAAA CACGATAGAG GAGACCAGTC AGTACTTCTT GGAGGGGGCN GGAGGAGAGA 60
GGAAAAGGGA GGGCGAGAAT NACCACACAA CACAGCCNTT NGACCATGAG CAGAAGCGTC 120
CGTGGGAACT CCACTGGGGT NGATGGGCTG CCTGCACAGC CCCTGGAGAG GGGGCCAGGC 180
ACACCCTCAG AGGAGCTGCA ACCCGTGGCC TGGCCTGCTA CATGCCCTGC TTCCACGTGG 240
NTGCCACGGT GACACANCCA CATTNACCAA TCCCNCCGG GTCCTGGGGA CGNAGNCACG 300
N 301

EP 0 679 716 A1

SEQ ID NO:3175

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03746

SEQUENCE DESCRIPTION:

GATCAAAGTT GTCATGAATA CTGACTTGGG CGTGGGACCC ATCCGAGATG TGCTGCACCA 60
CATCTACAGT GCGCTGTATG TGGAGCTGGT GGTGAAGAAT CCCCTGTGCC CGCTGGGCCA 120
AACTGTGCAA AGTGAGCTCT TTCGCTCCCG ACTGGACTCC TATGTTGCTT TTCTGCCCNN 180
NTTCTCCGCC CGGGCTGGCT GAAGCAACCT ACCTCAAGTN TCAGGAGAAT TCATGTCTNC 240
CTGGGGCCCT TCCGAACCTT GTGCCAACTA AGGGCCCCCA NTGTAAGCCC CCGTACCTN 299

SEQ ID NO:3176

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03747

SEQUENCE DESCRIPTION:

GATCTGAATT ACTACAGAAA AATAATTATG TTGCTTGCTT AATNATTCCC AGGAAACTTC 60
GTTGTAGGCA TATATTTTAT AAGAGTATTA TACAGTGTTA ACTATGCAAG TAAGTTCTAA 120
AATNACACAA TNATCTGTGT AATGTTTTAG TCCAATNACT GTGATTATT CAACTCTGTT 180
CTAAAGTTAT CTGGAATTGT CATGCTGCCT CAATTTACAG AAATCTATAA TAGATTCTTA 240
TAGAAATGTA TAAAGACGTA GCAGTCATTT TGTGTTTCT AAATAGATAA CATATAAA 298

SEQ ID NO:3177

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03748

SEQUENCE DESCRIPTION:

GATCAGAGTA TGGGTTCTCC ATGTAGCAAT ACTTCAGTGA GATTAAGTAT AAACAGTTTT 60
TGGCAAAAAA CAACACAGTC TACTCTTTCT GCTTACAAAG ACAAAGCCTT ACAAACCTAC 120
TATGAAGGTA AAGGGAGGAC AGCTTGCTTC TTGCCCAGA CATTACAAA GTTGTTTTTA 180
AANCACACTC ATAAGTAAGT TTGGCAAGTT GTTAAAAAA TGTCTCTTTG TTTGTACAG 240
TTCTGTTAGA TGTTGNATA TTTTAANAGT TTAATTANA ANNTTNATT TNGTCCN 297

SEQ ID NO:3178

SEQUENCE LENGTH:297

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03749

SEQUENCE DESCRIPTION:

GATCTNATTA CCTTCACGGA AGGAAGCGGA CGCTCACCAC GCTATGCCCT CTGGTTCTNT 60
GTGGGGGAGT CATGGCCCCA NNACCAGCCG TGGACCAAGA GGCTCGTNAT GGTCAAGGTT 120
GTGCCACGT GCCTCAGGGC CTTGGTAGAA ATNGCCCGG TAGGGGGTGC CTCCTCCCTN 180

EP 0 679 716 A1

GAGAATACTG TNGACCTGCA CATTTC AAC AGNCACCCAC TCTCNCCTTNA CCTCCGACCA 240
GTACAAGNCC TACCTGCAGG ACTTGGTGGA GGGNATGGAT TTCCAGGGNC CTGGGTN 297

5 SEQ ID NO:3179
SEQUENCE LENGTH:295
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03750

10 SEQUENCE DESCRIPTION:
GATCATCACA TTTCGTGAAT TGAGGCCATG TTCAGGTGCT AAGGAAGTAT GCCTTTNACA 60
CAGAAGATTG AGAAAATTTC CTAGATATAA ATACAGATAA ATCAGACGTT ACAGTGGTGA 120
CGTAGTAACC ATCATGGCAA TGGAAAGNAG TCCAATTCAT AGCCTAAAAC TTCAAATGTA 180
15 TTCTTAGGAG TCAGATTTTA CTGAATATTT TACCCACAAT AGCTGCCTAT TTTGTTATAA 240
TAAAATATAT ATAANTNTAT NTCTNNNCCT TCCTTTAANC TGTA AAAANNA NNNAN 295

20 SEQ ID NO:3180
SEQUENCE LENGTH:295
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03751

25 SEQUENCE DESCRIPTION:
GATCCAGCA CTACTTTTTA TTACTGGAGA AATGGGGGGG ATAGAAAATT CTACTTTGAA 60
TTATTTAGTT TTTTAAAG AGTGGGTGT GTTTGTNCTT CTCCACCTT TCAGCATTTA 120
TAGAACATGC TGCCCCACAT ACAAAGTCAA GACCACTTAC TTTTATGTGA CACTAGTAGT 180
TTGGGGTTAA TGTTTGTGT AAGANCAGCT GCATATGAGT AAAGTTACCC CAACCACAGT 240
30 GAGGAGGAAG ATGTTACAT ACTGGAAC TGCTGCCAAA TAAATTTTGC CCCTN 295

35 SEQ ID NO:3181
SEQUENCE LENGTH:294
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03752

40 SEQUENCE DESCRIPTION:
GATCAGTTAA TGCCTAAGAG TGAAAGTAGT TCTATTGACA TTCCTCAAGA TATTTAATAT 60
CAACTGCATT ATGTATTATG TCTGCTTTAA TCATTAAAA ACGGCAAAGA ATTATATAGA 120
CTATGAGGTA CCTTGCTGTG TAGGAGGATG AANGGGGAGT TGATAGTCTC ATAAACTAA 180
TTTGGCTTCA NGTTTCATGA ATCTGTAAC AGAATTTNAT TTTCAACCCA ATAATGTTCT 240
ATATAGCCTT TGCTAAAGAG CAACTNATAN NTTANCCCTA TTCNTCTGT GAAA 294

45 SEQ ID NO:3182
SEQUENCE LENGTH:293
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03753
50 SEQUENCE DESCRIPTION:

55

EP 0 679 716 A1

GATCCGTGCT GGAAACTCGC AGGGGGACTT TTACATTAGG CAAATCAACA ACGTCAGCGC 60
 CATGCTGGTC CTCGCCCGGC CGGTGACGTG CCCCCGGGAG TACGTGCTGG ACCTGGAGAT 120
 GGTCAACATG AATTCCCTCA TNAGTACCG GGCCAGCTCT GTACTGAGGC TCACCGTCTT 180
 TGTAGGGGCC TACACCTTCT GAGGAGCAGG AGGGAGCCAC CCTCCNTGCA GCTACCCCTAG 240
 CTGAGGAGCC TGTGTGAGG GNCAGAATGA GAANGGCAAT AAAGGGNGAA AGN 293

SEQ ID NO:3183

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03754

SEQUENCE DESCRIPTION:

GATCTGTGGA CTTTNAATTT TTTAAGAGAC TTAATCAATT TNATGACTGT ACTACCTGAA 60
 ACAAAGTGAG AAAGGACAGG TGTATTTTTC TAAGTNATCA AGATAAATCC TTAANAATTC 120
 AGTCTAAATN AGCAACCAGG AAGGAAAAAT ATATTAAAA CAACAAAAAA GTGGCACATG 180
 TCCAGGCAGT GTGAGGATTT GCTGTATATA AGTTGCCTGC TTTGTATTNT TNAATCTCT 240
 GCATCACTCA TTGGAAGTGC TTCTNAAGAG AGCTGCTCTG TGTTCAGTTG AAA 293

SEQ ID NO:3184

SEQUENCE LENGTH:395

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03755

SEQUENCE DESCRIPTION:

GATCAAGATG ACCAAGATGT ATAAAGGGTT CCAAGCCTTA GGGGATGCCG CTGACATCCG 60
 GTTCGTNTAC ACCCCCGCCA TGGAGAGTGT CTGCGGATAC TTCCACAGGT CCCACANNCC 120
 GCAGCGAGGA GTTNTCATT GCTGGAAAAAC TGCAGGATGG ACTCTTGAC ATCACTACCT 180
 GCAGTTTTNT GGCTCCCTGG AACAGCCTGA GCTTAGCTCA GCGCCGGGGC TTCACCAAGA 240
 CCTACACTGT TGGCTGTGAG GAATGCACAG TGTTCCCTG TTTATCCATT CCCTGCAAAC 300
 TGCAGAGTGG CACTCATTGC TTGTGGACGG ACCAGCTCCT CCAAGGCTCT GAAAAGGGNT 360
 TCCAGTCCCG TCAACTTGCC TGCCTGCCTN GGGGN 395

SEQ ID NO:3185

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03756

SEQUENCE DESCRIPTION:

GATCAGCACT TNANTCGGAA AGTTGGAACC TCTGACAAGA CCAAGTACTA CCTTCAAGGT 60
 AATCCGTGGC TTCCACAAA GTTCCACATT TAACTTCCTC CAAGGAAGGG GATTAATAAT 120
 TNAACTAAC TCCCTTCAGT TGAATCTCG GACCACTNNN NAAAACAAA ACCATGGTCT 180
 AATTNTTNC TTTGTTATGA ATTTNTTGAC AGTGGATTGA GCGATACGTG TCAGANTAN 240
 GCATTTCACT GTAGGCAAT TGTGTCTTAG TTATCANGTA AATGTACAAA 290

SEQ ID NO:3186

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03757

SEQUENCE DESCRIPTION:

GATCCAGATG ACTGAATTTC AGATAGCATT TTTATGATTC CCAACTCATT GAAGGTCTTA 60
 TTTATATAAT TTTTCCAAG CCAAGGAGAC CATTGGCCAT CCAGGAAATT TGGTACAGCT 120
 GAAATATAGG CAGGATGTTC AACATCAGTT TACTTGACGC TGGGAAGCATT TGTTTTGAA 180
 GTTGTACATA GTAATAATAT GTCATTGTAC ATGTTGAAAG GTTCTATGG TACTAAAAGT 240
 TTGTTTATT TTATCAAACA TTAAGCTTTT TTAAGAAAAT AATTGGGN 288

SEQ ID NO:3187

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03758

SEQUENCE DESCRIPTION:

GATCCCAAAA AAGTGAATAT CAATGGAGGA GCTGTTTCTN TGGGACATCC AATTGGAATG 60
 TCTGGAGCCA GGATTNTGG TCATTNACT CATGCCTGA AGCAAGGAGA ATACGGTCTT 120
 GCCAGTATTT GCAATGGAGG AGGAGGTGCT TCTNCCATGC TAATTCAGAA GCTGTAGACA 180
 ACCTCTGCTA TTTAAGGAGA CAACCCTATG TGACCAGAAG GCCTGCTGTA ATCAGTGTGA 240
 CTACTGTGGG TCAGCTTATA TTCAGATAAG CTGGTTTCAT TTTNATN 288

SEQ ID NO:3188

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03759

SEQUENCE DESCRIPTION:

GATCAGCAGC TGTGGAAATA AAGCTTGTA GCCCTCTGCT GGCCACAGTA NAGGAAAGTA 60
 GCACAAATAG GATACAGTTG TATGTAGTCA TTGGCAACAA TTGCATACAA TTTACTACC 120
 AAGAGAAGGT ATAGTATGGA AAGTCCAAAT NACTTCCTTG ATTGGATGTT AACAGCTGAC 180
 TGGTGTGAGA CTTGAGGTTT CATCTAGTCC TTCAAACTA TATGGTTGCC TAGATTCTCT 240
 CTGGAACCTG ACTTTGTCAA ATAAATAGCA GATTGTAGTG TCAAA 285

SEQ ID NO:3189

SEQUENCE LENGTH:284

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03760

SEQUENCE DESCRIPTION:

GATCTCACCA TTATGACATC CATCCCCCTA GCTCACCACA TAGCACATAG AATGATATTT 60
 TTAATTGTGA AGAGGCCATC CAGGTACTAA GGNCCCAAGG CATACAGATT CACAAAATNA 120
 ACTAATCTTT TTGCCTCAGA ATACAAAAC ANCAAAANTA TAAAGCTGTA TTTGGACANC 180
 TANAAAACAC CAAACTATCT CATTGCAATT NGTATTGTAG CAGATGTTCA GCAACTATCC 240

TAATCANTGT TATTGTGTTT CANTTTAACT GGGTTAAATG TTTN

284

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SEQ ID NO:3190

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03761

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SEQUENCE DESCRIPTION:

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GATCTCGACT CCCCCCTGGC CACAGACCCC CAGGTCATTG TGTTCACTGT ACTCTGTGGG 60
 CAAGGATGGG TCCAGAAGAC CCCACTTCAG GCACTAAGAG GGGCTGGACC TNTGCGGCAG 120
 GAAGCCAAAG AGACTGGGCC TAGGCCAGGA GTTCCCAAAT NTGAGGGGCG AGAAACAAGA 180
 CAAGCTCCTC CTTGAGAAT TCCCTGTGGA TTTTAAAC AGATATTATT TTTNTNATTA 240
 TTGTGACAAA ATGTTGNTAA ATGGGATATT AAATAGAATA AA 282

20

SEQ ID NO:3191

SEQUENCE LENGTH:279

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03762

25

SEQUENCE DESCRIPTION:

GATCTGGAGA AGTAAGATGG CCAAATAAAA GCCTCTACCA ATCATCCTCC CCACAGGAAC 60
 ACCAAATTTA AGAACTATCT ACACAAAAAA GCACCTTCAT AAGAACCAAA AATCAGAGAG 120
 AACAAGGATA AAGAAGTATC CAAATACAAA GAAAATGTTA TGCAAGTGAC CTTTAGAGAT 180
 GTTTTAAAGA TGACAAAATA TTGATGANGA TGGGCCAACA AGTGTTACTG TTACCTCTAA 240
 TAAAGTTTCA TCACTAGTTT CACCATGGTT AATTGGAAA 279

30

SEQ ID NO:3192

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03763

35

SEQUENCE DESCRIPTION:

40

GATCTGCTCA AATGCACCAA CACTGCCAAG TGAATAAGGT AGAAAAGAAA AATAACAGGT 60
 ATCGTCATCT GAAGGACAGA TGAATCTTTT TCTGCCCCTT CTTTACAATG GAATATAAGG 120
 AACAATTATG GGATGTCATC AGAATGGATG CCATAGGACC TACAGCTCCC TTTCTNTTTA 180
 TTGTNATTAT ACTTTAAATA TGACATTGTC TTTNATGTGT ATGTTCTAT ATTTTCAATG 240
 TATCTTTTTC CTTTCAAGTAA CCTGATATTC AAATAAA 277

45

SEQ ID NO:3193

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03764

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SEQUENCE DESCRIPTION:

GATCAGAGG AGCCTGTGTT TGTTGGAGGT GTTCCAGAAT CTNACTGAC ACCACGCTTG 60

55

EP 0 679 716 A1

5 GCCCCAGCA AACNTTCAC AGGCTGCATA CGCCACTTGG TGATTGATGG ACACCCAGTG 120
 AGCTTCAGTA AAGCAGCCCT GNTANGCGGC GCCGTANGCA TCAACTCCTG TCCAGCAGCC 180
 TGACATGACA NAGCACAGCT GCCCAANTAC AAAGTTCTTT AGNGCAATGN AAGNAACACA 240
 AAAGCCAGNC CAGGAGGCNC CAGTTNCTTA TTCCTTN 277

10 SEQ ID NO:3194
 SEQUENCE LENGTH:272
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03765
 SEQUENCE DESCRIPTION:
 15 GATCACAGAA GCCACTGCAC TCCAGCCTGG GTGACAGAGT GAGACTCTGT CTCAAAAAAA 60
 AATTAAATAA ATTATTATAA CCTTTCAGAA ATGCTGTGTG CATTNNATG TTCTTTTTTT 120
 TAGCATTACT GTCACCTCC CTAATGAAAT GTACTTCAGA GAAGCAGTAT TTTGTTAAAT 180
 AAATACATAA CCTCATCTG ANTAATGTCC CTCATTTTGA CTATAACTGT GCTTGGTTTC 240
 AAANGCAAAN TTAANCAAAA ATCTCAGTCA AA 272

20 SEQ ID NO:3195
 SEQUENCE LENGTH:272
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS03766
 SEQUENCE DESCRIPTION:
 GATCTCCTGC TGGTCAGTGG GCGCGCGGCA GCACTACCGT GGCCTGGTAC CAGGTGAGCC 60
 CGCTGGCCGC CCGCCTGCTC TACCCCTACC TGGCCTGGCT GGCCTTCGCG ACCACACTCA 120
 ACTACTGCGT ATGGCGGGAC AACCATGGCT GGCATGGGGG ACGCGGGCTG CCAGAGTGAG 180
 30 TGCCCGGCCC ACCAGGGANT GNAGNTGNAC CAGNAGGTGC CATNANGTTT NTAATNTAGT 240
 GGCCGTNANG TTTTAATGAC CANTGGGNC GN 272

35 SEQ ID NO:3196
 SEQUENCE LENGTH:269
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03767
 40 SEQUENCE DESCRIPTION:
 GATCCCATCT NTTTTCCCTT CTTTCCTCCT GGTCCGGTC AGTTCAGAGG ATTTAACAAT 60
 CACAAGTGC CTGCAAAAAT GCCTGAACAT TATTCTTAGG CCCTCGTGA TTTTTTTTTT 120
 CAGAAAACTT AAACAAAAA NGACTTACTA NGAATATGT ACAGCTACCC CTGTTTTCAG 180
 GCACTATGTT TGNGANCATT TTNGCCATTG ANGTTCACAC GTGGCATCAG CCCATGCAAG 240
 45 ATAGGTTTCT GTATTNNAT ATNANNNTN 269

50 SEQ ID NO:3197
 SEQUENCE LENGTH:269
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

55

CLONE:HUMGS03768

SEQUENCE DESCRIPTION:

GATCCAGCGA GGGGTCCAGG CCCTCTGCAT CTCCTCAGGC TCCAACCCTG CTCCTCAGC 60
 AATNAGCTCT CCTCCAGCTT TGGCTTTGGG AAGCCAGACT CCAGGGACTG AAAAGNAGCA 120
 ACAAGGAGAG GGTCTGCTTG AGAAATGCCA GATGCTTGGT CCCCAGGAAC TAAGGCGACA 180
 GAGTGCAGGG TGGGGGCAAG ACTGGGCTGT AGGGGAGCTG GACTACTTTA GTCTTCCTAA 240
 AGGACAAAAT AAACAGTATT TTATGCAAA 269

SEQ ID NO:3198

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03769

SEQUENCE DESCRIPTION:

GATCCCTCG AGCCAGGAG GNAGGTGTGT NAGCTCAATC CGGACTGTAN CGAGTTGGCT 60
 GACCACATCG GCTTTNAGNA GGCCTATCGG CGCTTCTACG GCCCGGTCTA GGGTGTGCT 120
 CTGCTGGCCT GGCCGCAAC CCCAGTTCTG CTCCTNTCCA GGCACCCTTC TTTCCTCTTC 180
 CCCTTGCCCT TGCCCTGACC TCCAGCCCT ATGGATGTGG GGTCCCATN ATCCAGCTG 240
 CTCCCAAATA AACTCCAGAA GAGGAAA 267

SEQ ID NO:3199

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03770

SEQUENCE DESCRIPTION:

GATCTGAACC TGTCATTGA AGTACAGGT AAAGACTGTG TCCACTTTGG GCATGAAGAG 60
 TGTGGAGACT TTTCTCCCC ATTTCCCTC CCTCCTTTT CTTTCCATG TTACATGAGA 120
 GACATCAATN AGGTTCTCT CTCTTTCTTA GAAATATCTG ATGTTATATA TACATGGTCA 180
 AATAAATAAA ACTGGCCTGA CTTAAGATAA CCATTTTAAA AAATTGGGCT GTCATGTGGG 240
 AATAAAGAA TTCTTTCTTT CTTAAA 266

SEQ ID NO:3200

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03771

SEQUENCE DESCRIPTION:

GATCTGACTT GGGGAAAGG TTATCAGAGC CTAGAGGGGC TAAAAAGTA ATCATTGAT 60
 GTACATACCA CACTCCTTG CTTCTTTCT CTTCCCTTAA CCCTTTCTGC TTTTCATTAA 120
 CCACATTCT GCACAACTCA TTTCTGAAAA CCTACCATGT TTCTTTACAG AGCCATCCAA 180
 AAATTTTGT TCCCTACATA GCAATTTCT GTGGCACTGA GAAACCATGT ATGACCACAA 240
 TAAAAATCCA TTTTGTGAAA GGAAA 265

SEQ ID NO:3201

SEQUENCE LENGTH:262

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03772

SEQUENCE DESCRIPTION:

GATCTCAGCT CACTGCAACC TCTGCCTCCT GGGTTCAAGC GATTATCCTG CCTCAGCCTC 60
 CTGAGTAGCT GGGATTACAG GCATGCGCCA CTATGCCAG ATAATNTTTT TGTATTTT 120
 GTAGAGACAG GGTTTTACCA TGTGGCCAG GCTGGTCTGG AACTCCTAAC CTCAGGTTAT 180
 CCCCCACCT TTGGGCCTNC CAAAGTGCTG GGATTATAGG CATGGANCCA CCGTGNCTGG 240
 NCANAGATGT AAGNTAAAT TN 262

SEQ ID NO:3202

SEQUENCE LENGTH:260

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03773

SEQUENCE DESCRIPTION:

GATCCACCTG CCTCGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CATGCCANC 60
 CACCTTTTCT ATNTTTAGAT ACATAAACAC TCACCACTGT GTCACAGTCA CCTACAGTAT 120
 TCAGTACAGT AGCATATGCT GTACAGGCTT GTAGCCTAGG AGCAATAGGC TATACCATAT 180
 AGCCTAGGTG TGTACACCAT CTAGGTTTTT CTAACCTACAC TCTATGGNGT TCACACAATA 240
 AAATTGCCCA NCGACGCAAA 260

SEQ ID NO:3203

SEQUENCE LENGTH:225

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03774

SEQUENCE DESCRIPTION:

GATCCAGCT TATGGCCTTG ACCCAGCCGT CCTCACAGAT GCCGGGTGAC CCTCTAGCTC 60
 TCTCTGCATC TCCACCCCC CGACACCTG GGACCCTCGA CCCCACCTT CTTTCTTACC 120
 AGCCCAGAGC CTTGTGGCTT GTACAGTTTT GAAACTCCCG TTCTATTTTA TGATGGTTGA 180
 TAATAGTCAG TAACNNAATA AAGGAACGTT TGTAAAATA TCAA 225

SEQ ID NO:3204

SEQUENCE LENGTH:216

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03775

SEQUENCE DESCRIPTION:

GATCTGCCC CGGCGNACCC GTGTTATGTT TTGTGCTGTG TCCACGCGCT AAGACGACCC 60
 CCTCCCCCGT ACTGACTTCT CCTATAAGCG CTTCTCTTCG CATAGTCACG TAGCTCCAC 120
 CCCACCCTCT TCCTGTGTCT CACGCAAGTT TTNNACTCTA ATATNNNNAT GGCTTTTTTT 180
 CTTGCGCAAA AAAATAATAA AACGTTTCTT CTGAAA 216

SEQ ID NO:3205

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03776

SEQUENCE DESCRIPTION:

GATCTGACAC TTCCTTTCCA TTGCTTGGCC TGAACAGACT GACCTTGTNA ACTTAAGCCT 60
 GGAGTCCATG CCTCGTCTTC CTTTGTTC TTTGCTGTAC CAAGAAAGCC AAGGAAGAGC 120
 AGCCTGACTC ATTCTTCTTG GCTGCAGCCT CTTCCCCACT TCCTGGGAGT GACCCAGCGT 180
 TATTCTGCC TCCTCACTCC TATTCTCTT GCCTTTGTGT AAAAATAAAA TGGAATAAAA 240
 CAAGTTGCAC AGTAAA 256

SEQ ID NO:3206

SEQUENCE LENGTH:256

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03777

SEQUENCE DESCRIPTION:

GATCTCTTTT NATCATATAT GACATTAAGG CTACAGAAGT TTTGTGCAAN AATCTTAATT 60
 CATATTTATN AATTTCAAGG GAATATTGAA AGGTTTTAAA ATGGCATACA GATAATGGAA 120
 AATAAGCTTT ATGTTTCAAG AAGGGCAGAC TCACGAATTT TTTAGAAAAC AGTGCTTCTT 180
 AATGATATGC TATTATNCTT ATNAGTTATG TGCAAGCTTT GTATATNCTT ATATNTATAT 240
 NTAACNTAA CCCTCN 256

SEQ ID NO:3207

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03778

SEQUENCE DESCRIPTION:

GATCCCAATT CGAGAGGTTT TAACCCAGAG ANCGGACATC TCGATTGCAC ACGTTCTGGT 60
 TGCCCGAGCC GACCTGTCTT GTCTCGTCCC AGCCACCAGC GTGGCTGTGC GNAGAGGGAC 120
 CTGCTGTGCC ATCAACAAGG TGCTTATGGG NAACGTTCCA TACCGGGGGN GCCGCCCAA 180
 TNAGCTGGAG CCTCCCATGC CCACCTGGAG NAGCNGAAGA GAGGATGGAG GCGCCCACTG 240
 NNGGNNTCGC ANN 253

SEQ ID NO:3208

SEQUENCE LENGTH:252

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03779

SEQUENCE DESCRIPTION:

GATCATGNTT CATGTGCTAA AAATAAACTT GAAACACGGA AGTAGTGGTT GGTCCAGTTT 60
 GAAAGCTCTT ATNAGTATTC TTCATCTGG CTGTAATAAT AGCCATNATT TGTNATGCCT 120
 TTGTTATGTA GCAGACACTC TTAAGNATTT NATGTGTATN ATTCAAATTG CTATNACTGT 180

TCTTTTATA GTTGAGAATC TCAGGATACC TACATTTATC ACTTTTCAA TATATATGTA 240
TTTCTTATTA AA 252

5 SEQ ID NO:3209
SEQUENCE LENGTH:251
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03780

10 SEQUENCE DESCRIPTION:
GATCAAGCTG TCCGAACCTA CCAAGAGCAC AAAGCAAGCA TGCATCCCGT GACTGCAATG 60
CTGGTGGGGA AAGACTTAAA AGTGGATTAA AGACCTGCGT ATTGATGATT TTAGAGATTT 120
CTCTTTTTTA AATGGAATTC GTAAAGAAAT ATAAACTTC AGCTCACAAT TAAAACTGTC 180
15 TTTTATGTTT TGGCTTTTTA TTGTTTGTG GGTGATTTA CTGAAATAAA GTTGAGCTAC 240
TTCTTCTTAA A 251

20 SEQ ID NO:3210
SEQUENCE LENGTH:250
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03781

25 SEQUENCE DESCRIPTION:
GATCTTGTGT TCAGATGAAA GTGCAAGTTT TTATTAATTT GGATTGCCTG AACAGTGTAT 60
CCCATGATGA TGAAGGAAAA TGGAGAGATT TTTCTTTTTA ACTCTGNNNN NTCAGAGATG 120
AAGCCACGCC TTTCCATTTT TCAATGCTGC ATATTTAATC TGCAACAAAA ATGTTAAGCC 180
ATAACAGCCT TTTATATTT TAGTTTGCA CCTTGCATT GCAGAATAAA TACTGGNTAA 240
30 CCATTTTAAA 250

35 SEQ ID NO:3211
SEQUENCE LENGTH:251
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03782

40 SEQUENCE DESCRIPTION:
GATCTTACTT GCTCCTGCTT ACGAAGATTN CCCAATNACT GGTCATCTGA CCCTACTTGA 60
ACACTCCTGA ACAGTCATGT TTTNAAAAT NTTCTTTAT ATCAAGTCAG AGAGTATACT 120
TCTATAAATT TNACTCATGG ATGTTAGGAA ATCTAGTCAT CTTCCCTGTG ATTGCCCTGT 180
TAAGTATTTA ACCATAGCTA TCATGTGTTT CCCAAATCTT CTCTAGATTA AATATCTTCA 240
GTTACTTCAA A 251

45 SEQ ID NO:3212
SEQUENCE LENGTH:250
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03783
50 SEQUENCE DESCRIPTION:

55

EP 0 679 716 A1

5 GATCTAGACT GAGAATCAGC CTGAGCTTTA CACAGCTGGG GTCTGTTACT CGCGTTTTGT 60
 AGACTTTTGT GTAACATTTT GTACCGTAGA CAGAAATGTGA GGAGGAAGTA ACACACAGAG 120
 GAGGATGTGT GTGTATGCAT GTGTTTGAAT TCACAAGGAA GAAATTATTT ATCTTGAGCT 180
 TTTTCCTTTG TTATTCAATT TCTATTGATT TATTAGTAAT AACAAATGATA ATAAAAATGTA 240
 AATGAGCAAA 250

10 SEQ ID NO:3213
 SEQUENCE LENGTH:250
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03784
 SEQUENCE DESCRIPTION:
 15 GATCTAACGT GTTCCAGTGT CTGTCTGAGG TGTCTTAAAA AATCAGAACA AAACCTTCTAT 60
 TATCCAGAGT CATGGGAGAG TACACNCTTT CCAGGAATAA TGTTTTGGGA AACACTGAAA 120
 TNAAATCTTC CCAGTATTAT AAATTGTGTA TTTAAAAAAA AGAACTTTT CTGAATGCCT 180
 ACCTGGCGGT GTATACCAGG CAGTGTGCCA GTTTAAAAAG ATGAAAAAGA ATAAAAACTT 240
 TTGAGGNAAA 250

20 SEQ ID NO:3214
 SEQUENCE LENGTH:250
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS03785
 SEQUENCE DESCRIPTION:
 GATCATAGGT CTGGACACTC CATCCTTGCC AAACCTCTAC CAAAAGTGG CCTTAAGCAC 60
 CGGAATGCCA ATNAACTAGA GACCCTCCAG CCCCCAAGGG GAGGATTGG GCAGAACCTG 120
 30 AGGTTTTGCC ATCCACAATC CCTCCTACAG GGCCTGGCTC AAAAAAGAG TGCAACAAAT 180
 GCTTCTATTC CATAGCTACG GCATTGCTCA GTAAGTTGAG GTCAAAAATA AAGGAATCAT 240
 ACATCTCAA 250

35 SEQ ID NO:3215
 SEQUENCE LENGTH:250
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 40 CLONE:HUMGS03786
 SEQUENCE DESCRIPTION:
 GATCAAACTG CCATTACAG TGTAAAGCAG CACTTAAATT TCGAACCTAA AGTTTAGATG 60
 CATTGTATAA AAAAACCTAA AAGCAGTATC TGTNNTNNN GCTGTAAACC AAGTTGGAAG 120
 CTATTCGGAT AATTTCTTAA ATATTGATGA NCTTTGGAGT ACTGTTTCTN CCTTCAAAC 180
 45 GAATGTAATT AATNCATGAT TAAATGCACC TNATATGTTT AANCAATCTT TGTATACTTN 240
 TGGGNTTTN 250

50 SEQ ID NO:3216
 SEQUENCE LENGTH:252
 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03787

SEQUENCE DESCRIPTION:

5 GATCGCCACA CTGCCACTCT GCTGCCCAGC CACCAGGATT TCTGCCTGGA GCCCTTTGCC 60
 CTGTCCCTGC TGCCTGAGGT GGCCTAGAGC AGAGGAGAAG AATTGCTCC AGGCCAGGAG 120
 CACAAATCGT TGTTCATGA ATTTNTCTCC AACTCGACCT TGGTAAACGG AAATNTTGGG 180
 GGTGAAGAGA AACAATCACT ATTTTNTCT TTTTATCTG GTAAATAATT AAAAGAAAAA 240
 10 CCGAACACTA AA 252

SEQ ID NO:3217

SEQUENCE LENGTH:336

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS03788

SEQUENCE DESCRIPTION:

20 GATCTGTATT GGATAAGGAC CAATGNACAG CAAAGCAAAA ATGGCTTTAA AGCTTGGTGT 60
 TACTTTTNTT AAGTTGTTTA ATTATAGTTA AGCAATTTCA AAAATGCTCC AAAGAAATGT 120
 GAAAGGACCT TTTGTCACAG CACTTCAGAA AATACACAAC AGCCCCTTCT GCCCCCGCAC 180
 AGAAATGCTG CAGAGTATAT AAAACTTGAG ACATTTTGT AGGATGCCTG ACGAGGTGTN 240
 GCCTTTTATC TTGTTCCGG ATGCATATTT ATTACGAGTA CTCTGGTTAA ATATTGAAAA 300
 GTTATATGCT GTAGTTTTTA GTATTTTGTG TTTGTN 336

25 SEQ ID NO:3218

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS03789

SEQUENCE DESCRIPTION:

35 GATCTCGAGT GTTATTTTCT GATTGTGGTG TTGAGAGTTG CACTCCCAGA AACCTTTTGA 60
 GAGATGCATT TATAGCCCTA GGGGTGGTAT GACCCAAAGG TTCCTCTGTG ACAAGGTTGG 120
 CCTTGGGAAT AGTTGGCTGC CAATNTCCCT GCTCTTGGTT CTCCTCTAGA TTGANGTTTG 180
 TTTTCTGATG CTGTTCTTAC CAGNTTGGGA AAAAAGTGTG GATTAAA 227

40 SEQ ID NO:3219

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03790

SEQUENCE DESCRIPTION:

50 GATCTGCATA GAAAAATTTN ATACAATTTT TTGAAAGTCC TTAGGTGAAA CATTTACCCA 60
 TTA AAAAGGA AGCAGAAATA CTGAGACATG AAAGGCATTA TCAACTAACT CTAGACTCTA 120
 GAACCCATTC TNGCATATCT CACGTGCAAT TTTAAAAAT AAGTTAATAA TTCANCTCAT 180
 ATCAACAAAA GCCTTTGNNA CATGGGTTT CACTNGATAT CACCTAGTGC TNANGNTAGA 240
 NGCCAANN 248

55

SEQ ID NO:3220

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03791

SEQUENCE DESCRIPTION:

GATCCAGTGC TCTCCCATCT AACAACTAAA CAGGAGCCAT TTCAAGGCGG GAGATATTTT 60
 AAACACCCAA AATNTTGGGT CTNATTTNNA AACTTTTAAA CTCACTACTG ATGATTCTNA 120
 CGCTAGGCGA ATTTTTCCTA ACACATAGTG TGTGTNTTTT GTATACACTG TATGACCCCA 180
 CCCCAAATCT TTGTATTGTC CACATTCTCC AACAAATAAG CACAGNGTGG ATTTAATTAN 240
 GCAAA 245

SEQ ID NO:3221

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03792

SEQUENCE DESCRIPTION:

GATCCACCCG CGTTGGCCTC CCAACGTGCT GGGATTATAG GCGTGAGCAC CACGCCCCGC 60
 CTAAATCCA TATTCAAAGA AGCAATTTCA GTTCCTTTCT AAGCTTTGTC AGTCAAGGGG 120
 CTCCACTGAC TTCCTAGGCC CTGTAATTGA ACCAGTCTTT AAGGTTTTGC AGGAAAGTCC 180
 CTTCTTCCAA GTGGTTTTTC CAAATCGCAC AATGGCAAAG CCAAACAGAG GAAGAAACAT 240
 TAAA 244

SEQ ID NO:3222

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03793

SEQUENCE DESCRIPTION:

GATCAGATTG CTGAAACACT ATGGGAACAG GTATTGAAGC CCCTGGGTGA TAATNTAATG 60
 GAGGAAAACA TAAGGCAGTC TGTAACAAAC TCTATCAAAG CAGGCCTGAC TGACCAGGTG 120
 TCTCATCATG CCAGATTAAA GACAGACTGA CAGTTCATCT CCTCACGGAC TCCACTCTCT 180
 TTTTTTTTNA TGCTTGCTGT ACAATGAGAA CTCAAATAAA ANTAAACCAA AGTTTACAAT 240
 CAAA 244

SEQ ID NO:3223

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03794

SEQUENCE DESCRIPTION:

GATCCAGGAG GAGCAGCACC CGAGCCCTGG AGTGGCCCAG TACCCTTCCA AGAGGCCACA 60
 GTCCAGCCA GGACAAAGTA TGCGGCCCAT CCTGGTGCGN CAGGTGGGAC AATGTGAACA 120
 TGGACTCGAA GACATGGCCC TTTCTCTGTA GTTGATTTTT TAAATGTGCC ATTATTGTTT 180

EP 0 679 716 A1

TTAAAAAANN CGGNAAAANG AAANGCANAC AAATAAAACA CCTTTAAGAG GCTTGAANGC 240
GNCAAA 245

5 SEQ ID NO:3224
SEQUENCE LENGTH:243
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03795
10 SEQUENCE DESCRIPTION:
GATCATAACT CATGAATATG TTTGTAATCA TGGTAATTTA GATTTTNATG AGGAATGAGT 60
ATCTGGAAAT ATTGTAGCAA TACTTGGTTT AAAATTTTGG ACCTGAGACA CTGTGGCTGT 120
CTAATGTAAT CCTTAAAAA TTCTCTGCAT TGTCAGTAAA TGAGTATAT TATTGTACAG 180
15 CTACTCATAA TTTTAAAG TTTATGAAGT TATATTTATC AAATAAAAC TTTCCNATAT 240
AAA 243

SEQ ID NO:3225
SEQUENCE LENGTH:241
20 SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03796
SEQUENCE DESCRIPTION:
25 GATCTGACCT TTTTTTCCA GTTGAAATGT ATTAACACAC CTCCACAAT NATTTTATAA 60
GAGTCAGCAT AACATAGTGG ATAAGAACTG TGAGATGTTT AACCTCTCAG TAACTCGGTT 120
CTCTCATTAT AAAATAGGAA TAAATCAGT ACCTGTTTCA TATGAAGGTC GTTCTGAGA 180
ATTAATGGA CTAATGTATG CAAAAAGCCT GGCAAACAAT AAACACTCAT CTGACTTTAA 240
A 241

30 SEQ ID NO:3226
SEQUENCE LENGTH:240
SEQUENCE TYPE:nucleic acid
35 TOPOLOGY:linear
CLONE:HUMGS03797
SEQUENCE DESCRIPTION:
GATCAAAATA TATTTGTCCA GAAACTCTTG GGCCAGTTCT CTGAGAAGGA ACTGGCTGCT 60
40 GAAAAGAAAC GCATCCTGCA CTGCCTGGGG CTGCAGAAG AAATCCAGAA ATATTGCTGT 120
TCAAGGAAGT AAGAGGAGGA GGTGATGTAG CACTTCCAAG ATGGCACCAG CATTGGGTTT 180
TTCTCAAGAG TTGACCATTA TCTCTATTCT TAAATTTAAA CATGTTGGGG AAACAAGAAA 240

45 SEQ ID NO:3227
SEQUENCE LENGTH:239
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03798
SEQUENCE DESCRIPTION:
50 GATCCTCCCA CCTNCAGCCT CCAAGTAGC TGGGACTACA GGCACATGCT ACCATGCCCA 60

55

GCTAATTA AAAAATTTT TTTTGTAGA GACGGAGTTT CACTGTGTTG CTCAGGCTGG 120
 TCTTGAATC CTGAGTTTCA GCAACCTCC ACTTCAGCTT CCCAAAGTGC TGGGATTACA 180
 GGCATCACTG GCCCAGGCAG AGCCAATTNT GTATAATAA TCTGTNTCTC TCTGTCAA 239

SEQ ID NO:3228

SEQUENCE LENGTH:238

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03799

SEQUENCE DESCRIPTION:

GATCAAATTT NATTGAATGG TTTGAGGTTG TAGCTCTATA AATAGTAGTT TTTAACATGC 60
 CTGTAGTATT GCTAACTGCA AAAACATACT CTTTGTACAA GAGGTGCTTC TAAGANTTTN 120
 ATTGACATTA ATGACACTGT ATACAATAAA NGTGTAGTTN CTNAATCGCA CTACCTATGC 180
 AACACTGTGT ATNAGGTTTA TCATCCTCAT GTATTNTNNT GTGACCTGTA TGTNTATN 238

SEQ ID NO:3229

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03800

SEQUENCE DESCRIPTION:

GATCCAAAGC CATCCCAGAC CTTCCCGGGC CCCTCTTCCT GGCAGATGAC TCTCCCGGCT 60
 TCTGCGTCTT GCCTGCCCCT TCATACCACT TTGAACTGCA ACAGCCTAGC TCCTCACCTG 120
 TGCACCTCTT TCCCAGGTG TGCACGTCTC CAGCCCCGAG CGCGTGTCTT CCTGCTCATC 180
 TGGGTTTCCT GGGCAATAG TGGCCCTCAA TAAATNTTG CTGAGTGAGA ACATAAA 237

SEQ ID NO:3230

SEQUENCE LENGTH:515

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03801

SEQUENCE DESCRIPTION:

GATCGCCAGA GCCCAGGAGT TTGAGGCTGC AGTGAGCTAT GAGGGTGCCT CTTTGCTCCA 60
 TCCTAGGCAA CAGAGTGAGA CGCTGTTTAA AAAGGAAAAA ATCCTTCNT AGAGCTAGTA 120
 TCCTAAAGCT GCAGAGCTAG CCCATGACCT CATTGGTTTC NTTGCTTG GGGTGCTTTT 180
 CCTGAATCTT TGGGGGTGAA GGGAGTNTG CTCCAGTCC AGAGGCTGA TTCTTTTCGG 240
 ACTGGGTCT CAAGACACGA CCAGGTTCTC AAGACACGAG TCCCCTTNTT CCTNCCCATT 300
 AAAGGGGTT TNTNAGAAGC AAGANCAGCC CCTTTCCCA AGTCACAGCC TGAAGGGAGG 360
 CCCNGAGAN GCTTCCCTCC TTTCCCNCA CCCTGNTTCC TTAACCTNT TTTGNCCCTG 420
 NTTTTTTAG GAANCTGGNA GTTTCAATTN GTTTTAANG GGGGATTGGG GGGGAAGGGA 480
 AGNCTTNGGG GGACAAAAA NNTTTTNTT NCAAN 515

SEQ ID NO:3231

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS03802

SEQUENCE DESCRIPTION:

5 GATCAGTGTG TCGGAAAAGG TTTTtagGAA GTATGGCAAA AATGTTGTAT TGGCTATGAT 60
GGTGACATGA TATAGTCAGC TGCCTTTTAA GAGGTCTTAT CTGTTcAGTG TTAAGTGATT 120
TAAAAAATA ATAACCTGTT TTCTGACTAG TTAAAGATG GATTTGAAAA TGGTTTTGAA 180
TGCAATTAGG TTATGCTATT TGGACAATAA ACTCACCTTG ACCTAAA 227

10

SEQ ID NO:3232

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS03803

SEQUENCE DESCRIPTION:

20 GATCACTAGC TAATNCTCAT ATCCATGCCT TTTTGTcCTG TTTACAGTCT TAAAAGAGGT 60
AAAACAGCAA ATATTTTTTN AAGGGAAC TAACCTTAGG ATTCCTGAAA ANAATTTCAA 120
AAAAAATA AAGACACTGT TGCCAATGTG NCCCAAACT TAAGACCATA CTAATGGCAT 180
ATATTTGTNA CAATNAAAAA TTAANTTTAC TACTTAATCC TAAA 224

25

SEQ ID NO:3233

SEQUENCE LENGTH:310

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30

CLONE:HUMGS03804

SEQUENCE DESCRIPTION:

35 GATCGGTGCT TTGTGTAAAT ACATCTTTAA CATTGGGGTG GAGAGGGGCC TTAAGAAGGA 60
CAGTTCATTG TAGGAAAGCA ATTCTGTACA TGAGTTTAAG CATTCTTGTT GCATTGTCTC 120
TGCAGATTCT ATTTTGTGTT ACAATATTAA AATGTATGTN AGCAAAATGG GTGGATTTTC 180
AAATAAATG CAGCTCCAC AAAAGTTTG TNATGGTATT CTGGTCTGAG ATGCATTTNC 240
ATTTTNCCTN TCTCTNTTA TTATCAATAT TGTNATTTT CCCTAATAAA ATATACCCAG 300
GTGNATTAAA 310

40

SEQ ID NO:3234

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

45

CLONE:HUMGS03805

SEQUENCE DESCRIPTION:

50 GATCAAAATTT TTNAGACAAT CCTTGGTCTG GATTGGTTAA TGAAATNTN TTGTTTAAGA 60
GGTCTATTA AAAAATATTT CTAGTGTATT AGTCATAATT NTTTTGTGG AGTGGGGGTA 120
AACCACACCA TTAAGGGAAT AAAATGTAAT TTGAAAGAGG TGATTATAAG ATTTGTTTCA 180
GGCCCCAAAA TATAAATAAA AATTGGTGTG GAATCTCAAA 220

55

SEQ ID NO:3235

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03806

SEQUENCE DESCRIPTION:

GATCGATACA GAGCATCTGC ACTGGGATTG TCCGCCCCGC CTGTCAGGGA GGCCTCGGGG 60
GCTAATNGAG CTGAGGGTAT AGTCGGCCTT GGACCCTCGC TTTTTCCTT TCCTGTACTA 120
TNAAGATAAC TGCCTTATCT CCCCTCAGG ACTGTTTTGG GGATTAAATA GGACGTTTAA 180
ATNACCAACG CTCTTTGAAA TAAACATTTC AAAATTAAA 219

SEQ ID NO:3236

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03807

SEQUENCE DESCRIPTION:

GATCAAAAAA ACTTTTCTTC TTTTGCAAAG AAAGCTTTTT GTTTTAAACN GCAACGTACT 60
TTTCCCTAC CTTGAAGAGA CATGGTGGTC GCAGCTTCTN ATCTATATGA AAAAGTTTTT 120
GATGTATTGG AATNATTGG GAATGCTTTT AAAACAATT GTATTATTT CTTTACAAAC 180
CAAAACAGAA CAGAAAGGTG TGGTCTGGA ACATCGAAA 219

SEQ ID NO:3237

SEQUENCE LENGTH:265

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03808

SEQUENCE DESCRIPTION:

GATCTGCATT TTCAGAAGAG GACAATCAAT TGAACTAAG TAGGGGTTTC TTCTTTGGC 60
AAGACTTGTA CTCTCTCACC TGGCCTGTTT CATTTATTG TATTATCTGC CTGGTCCCTG 120
AGGCGTCTGG GTCTCTCCTC TCCCTTGAG GTTTGGGTTT GAAGCTGAGG AACTACAAAG 180
TTGATGATTT CTTTTTATC TTTATGCCTG CAATTTTACC TAGCTACCAC TAGGTGGATA 240
GTAAATTTAT ACTTATGTTT CCAAA 265

SEQ ID NO:3238

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03809

SEQUENCE DESCRIPTION:

GATCTACTAT AAGGTATTCT ATATTTATAT NACTTCAGAG ACGCGTATGT AATAAAGNAC 60
GCCCTCCCTC CAGTGTCCAC ATCCAGTTCA CCCAGAGGG TCGGGCAGGT TGACATATTT 120
ATTTTGTCT ATTCTGTAGG CTTCCATGTC CAGAATCCTG CTTAAGGTTT TAGGGTACCT 180
TCAGTACTTT TTGCAATAAA AGTATTTCTT ATCCAAA 217

SEQ ID NO:3239

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03810

SEQUENCE DESCRIPTION:

GATCGGTGCT ACCAAGGAAG AGAGCACACA GATAAGACAG AGGGGAGGAG GTGGGCATT 60
 CCTACATTCC TCCTTGTTN CCGCTGCTGA NATTCAGTA TTTATTGCAA TNTAAATNTA 120
 TCCTGAAGGT GGGGAGGAAT GTTAAACTA CCAATNTCCGT GTGCATCTT GGTNTGTTTT 180
 TNTCCCTGTT TGTAGCAAGA CTCTNATGAT AATNCTN 217

SEQ ID NO:3240

SEQUENCE LENGTH:217

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03811

SEQUENCE DESCRIPTION:

GATCTATATG AAGTGGGAAT ACAGCATATA TCTGGATATT CTTATAGTTA TCTTTTAAAC 60
 ATCTATTTTT TTTCATTAAT TACATATCAA CATTAAATNTT GTATCTNGAA GCAAATNGAT 120
 TTTGTATAAT TAAATGTGTC AAGCATCTGT ATTAATTGAT TNGATGGCAT AAGGTATGAA 180
 ANTANTGTAC TGCCCCATGT ATNACTGTTC CAACCAN 217

SEQ ID NO:3241

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03812

SEQUENCE DESCRIPTION:

GATCATAAGA CCAGGAGTTC AAGACCGGTC TGGCCAACAT GGTGAAGCCT CATTNTACT 60
 AAAAATACAA AATNAGCCAG GTGTGGCGTC ACATGCCTGT AATCCCAGCT ACTCAGGAAG 120
 CTGAGGCAGG AGAATTGTTT GAACCTGGAA GGTGGAGGTT GCAGTGAGCC GAGATTGTGC 180
 CACTGCACTT GACAGAGCGA GACTCTGTCT CAAA 214

SEQ ID NO:3242

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03813

SEQUENCE DESCRIPTION:

GATCATCGAG GACGAGAAGA TGGTGGTGGT GGCGNTGCAG CCGACTGCAG AGCTNGAGGT 60
 GGGCTCGGCG GAGGTCATTG TGGAGTCCCT GGCCAGGGN GGCTGGCCT CCCAGCTCCC 120
 CGGCCAGAGA CTGTGTGCAG AGNAGAGCTT CACCGGCCAG GTGTCCTGGA GCCCTCCCTC 180
 ATNATNACAG CTGCTGTCCC CGAGGACTGT GATN 214

SEQ ID NO:3243

SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03814

SEQUENCE DESCRIPTION:

GATCTGGGGA GCTNTGACTG AAGGGGCTTG GTCTTCCACT CAGCATCAGC NTGGCAGTCA 60
 CCACCCAGT NAGGACCTCG ATGTCCAGCT GCTGTCAGGT CTGATAGTCC TCTGCTAAAA 120
 CAACACGATT TACATAAAAA ATCTTACACA TCTGCCACCG GAAATACCAT GCACAGAGTC 180
 CTTAAAAAT AGAGTGCAGT ATTTAAACCA AA 212

SEQ ID NO:3244

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03815

SEQUENCE DESCRIPTION:

GATCTCTGTA GACTAGAGTC TTGCAGCAAC ACAGAATGTA ATATAAGGCA AATGCATCTG 60
 GGACTTGACC AAAGTTGTTT TGTTTTGTTT TTTTAACTGA AAGTAACAGA AGGACCTTTC 120
 TTAAATGTGA CAGATGGTCC TGCAGTGTGA ACCTGAAGGA CAGTGTAAAA GCTGGGCTCT 180
 AGTATATTGA TGATTCTGC ATAAGTGTGG N 211

SEQ ID NO:3245

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03816

SEQUENCE DESCRIPTION:

GATCTATTTT TGCCTGGAA TATCTGAGAA TTGCAAACT AGACAAAAGT TTCACAACAG 60
 ATTTCTAAGT TAAATCATTT TCATTAAAG GAAAAAAGAA AAAAAATTTT GTATGTCAAT 120
 AACTTTATAT GANGTATTAA NNTGCATATT TCTATGTNGT AATATANTGN GTCACAAANT 180
 AANGCTGTGA CAGTNCCTGTT GGTCTACAAA 210

SEQ ID NO:3246

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03817

SEQUENCE DESCRIPTION:

GATCTTTTAC CACTAAAAGA GCATTATTCT CATGTCATAA TGAGAATAAT AATTACATA 60
 CTTGGCATAA TAAATGCCTA AAAGACATTT TATINTCTGA ATCTATTTTT TTCTTGCTAT 120
 AATGGGGATA TTGTAAATAA TGCATTTGTA TTAATGGTAT TTCTTAAAGC AATCTATGTA 180
 ACTGTAAATT AAACCAATCT ACAAATAAA 210

SEQ ID NO:3247

SEQUENCE LENGTH:210

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03818

SEQUENCE DESCRIPTION:

5 GATCAGAAGT GGCTAATTTA TTTNATTCT NATTATTTTA TCCAGAGGGT ACTTTTTTAA 60
 TGGATATTTG TAAATCTNCC ACTTAACCAC TGAAAAATAAT NTTNTTTTAA TCCCACCCCT 120
 CCATCCATAC CTCTGCCTCC CCAAAAAGCT CCTATNAATT TNCTTATCCC CCTCATGTAG 180
 CTAGTTGAAT GTGAATAAAT AACATGGAAA 210

SEQ ID NO:3248

10

SEQUENCE LENGTH:206

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03819

15

SEQUENCE DESCRIPTION:

GATCTCCATT CTTTGCCATG AGGGCCAACA CATGAGACCC CACCTCCCTC CCTGCCTGCC 60
 AGCCCTAGAC TTGTTGGAGC ATAGAGCCCT TCCTCCCAG GCCTAAGTAT GTGGAGCTCT 120
 GCTTTGGCAC TGCCCCGAG AGGCCACGCC TATTTATCT GTTCTNTTG TTTTGT TTTT 180
 20 AACAACTATA CTTTGCACAC ATGAAA 206

SEQ ID NO:3249

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

25

TOPOLOGY:linear

CLONE:HUMGS03820

SEQUENCE DESCRIPTION:

GATCCCCAGA GTTGGTCCAA GGAGGGAGAG TGGGTTCTCA ATACGGTACC AAAGATATAA 60
 30 TCACCTAGGN TTACAAATAT TTNAGGACT CACGTAACT CACATTATA CAGCAGAAAT 120
 GCTATTTTGT ATGCTGTAA GTTTTCTAT CTGTGTACTT TTTTAAAGG GAAAGATTTT 180
 AATATTAANC CTGGTGCTTC TCACTCAA 209

SEQ ID NO:3250

35

SEQUENCE LENGTH:335

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03821

40

SEQUENCE DESCRIPTION:

GATCTGTGTG GTCCCCGACG TAACATCTGG CGAGACCCTG CCCTCTGCTG TTACCTGAGT 60
 CCTGGGGATG AACAGGTCAA CTGCTTCAAC ATCAATTATC TGAGGAACGT GGCTCTAGTG 120
 TCTGGAGACA CTGAGAACGC CAAGGGCCAG GGGGAGCNGG GCTCAACTGG AGGAACAAAT 180
 45 ATCAGCTCCA CCTCTGAGCC CAAGGAAGAN TGAGTCACCC CAGAGCCCTA GAGGGTCAGA 240
 TGGGGGGAAC CCACCCTGCC CCACCCATCT GANCACTCAT TACACTAAAC AACTTTTTTG 300
 GNAANTNTNA TNTATGATGN GNNGNNGTG GGGAN 335

SEQ ID NO:3251

50

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

55

EP 0 679 716 A1

TOPOLOGY:linear

CLONE:HUMGS03822

SEQUENCE DESCRIPTION:

5 GATCTAATTC TNCACCTCTG CTCCAAGGGC TGGGCTGTGG GTGGGATACT GGGATTTTGG 60
GCCACTGGAT TTTCCCTAAA TTTGTCCCCC CTTACTCTC CCTCTATTTT NCTCTCCTTA 120
GACTCCCTCA GACCTGTAAC CAGCTTTGTG TCTTTTNNCC TNTNCTCTCT TTAAACCAT 180
GCATTATAAC TTTGAAAGCA AAACAAA 207

SEQ ID NO:3252

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15 CLONE:HUMGS03823

SEQUENCE DESCRIPTION:

GATCTCATTT NAATGATTTA TAGGTAAATA CTAATCAGAC ATTATTAATA GCAAAACAGG 60
AAAAAGGTAA ACTTCTTAAA TTTAGTTACC TATAAAAATT GTCAATNTTN ATTCTTTAAA 120
20 AACACATGGA CTTACTATAA AAGCCTTTTT GTACTAGTGA AAAGAATCTT CAGCTATATA 180
GAAATAAAGT TATACTTTAA A 201

SEQ ID NO:3253

SEQUENCE LENGTH:201

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03824

SEQUENCE DESCRIPTION:

30 GATCCCTAAA AGACAAAAGA GTCTTGAAA GGAAGTCTGG CTTCGTCTTG AACGTTTCGCC 60
CCATCACCAG TGTGAGTCCG TGGGGAAGTC TTCCTCAAGT GGGGTTCACT CTGTAATTTT 120
CCTGTCTGTT CTTAGCANNNG TTCTGAGTTA TTTTGGATT TTTCTTTAG CCAAATAAAG 180
GCAGTGTGGT TTTACCTGAA A 201

35 SEQ ID NO:3254

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS03825

SEQUENCE DESCRIPTION:

GATCCTAATG GTGCTGCCCT ATTTATACCT GGGTCTGCAT TAAAAGGGAA AGCCCCCCT 60
GTTGTAGATT TCATCTGCTT CCTCCTTAGG GNAGGCTGGG ATATGATGAG AGATTCCAGC 120
45 CCAAGCCCGG CCCCCACCG CCAGGCCATA GGGCATANTT TGCATCTCAA ATCTGAGGAA 180
TAAACTGATG ACCTGTGAAA 200

SEQ ID NO:3255

SEQUENCE LENGTH:391

50 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

55

CLONE:HUMGS03826

SEQUENCE DESCRIPTION:

5 GATCAAGCAT TTGCGTTTGG ATGGCAATCG CATCTCAGAA ACCAGTCTTC CACCGGATAT 60
 GTATGAATGT CTACGTGTTG CTAACGAAGT CACTCTTAAT TAATATCTGT ATCCTGGAAC 120
 AATATTTTAT GGTATGTTT TTCTGTGTGT CAGTTTTTCAT AGTATCCATA TTTTATTACT 180
 GTTTATTACT TCCATGAATT TTAATCTG AGGGAAATGT TTTGTAAACA TTTATTTTTT 240
 TTAAAGAAAA GATGAAAGGC AGGCCTATTT CATCACAAGA NCACACACAT ATACACGGTT 300
 10 AGACATCAAA CTCAATGCTT TATTTGTNAA TTTAGTGGTT TTNTATTCT ACTGTCAAAT 360
 GATGTGCAAA ACCTTTTTNC CGGGTTGCAT N 391

SEQ ID NO:3256

15 SEQUENCE LENGTH:194

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03827

SEQUENCE DESCRIPTION:

20 GATCTTTAAT TTGNATGGTG ATGAATGTCT TAGTCATGAA GAGTTTCTAT GGGGTGTNAA 60
 AAAACAGAAT GCATCGAGGT TNATGGGTAC CACAACATCA GAGTATACAA GAATACTGGA 120
 AGTGTGTGAA GAAAGAAAGC ATTAAAGGAG TAAANGANGT CTGGAAACAN GCTGGAAANG 180
 GTCTTTTNA ATNN 194

25 SEQ ID NO:3257

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

30 CLONE:HUMGS03828

SEQUENCE DESCRIPTION:

35 GATCTAGTAG GTTCTATTT TTCCTTCTC TTTACAATGC ACATAATACT TTCCTGTATT 60
 TATATCATAA CGTGATAGT GTAAAATNTG AATNACTTTT TTTGTGAATG AAAATCTAAA 120
 ATCTTTGTAA CTTTTTATAT CTGCTTTTGT TTCACCAAAG AAACCTAAAA TCCTTCTTTT 180
 ACTACACAAA 190

40 SEQ ID NO:3258

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03829

SEQUENCE DESCRIPTION:

45 GATCCCCCTT TNTNCTGGAG CTTCCGTGCC TCCCCTGCCT CTTCCAGCC CTTGTAATCC 60
 TCCTTCACAG GCCAGCCAGA TACCTGTNTG GCCTNTGGGC CCATTTNTT CCCTGTCTGT 120
 CCCCACCCCA CAAGAACCAG GTTCTNTAA TAAATTCTCT CCCTTCTTTA GCCAGGACTT 180
 AGCCCGCAAA 190

50 SEQ ID NO:3259

SEQUENCE LENGTH:189

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03830

SEQUENCE DESCRIPTION:

GATCTNAGAG CCTGCCCAAC AGCAGGGAAG CCAAGCACCC ATTCATCCCC CTGCCCCCAT 60
CTAACTGCGT ANTGANAAAG GGAACAGTGC CATGTACCAC ACAGATGTTT CTGTCTCCTC 120
GCATGGGCAT AGGGACCCAT CATTNATGAC TGATGAAACC ATGTAATAAA GCATCTCTGG 180
GGAGGGAAA 189

SEQ ID NO:3260

SEQUENCE LENGTH:188

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03831

SEQUENCE DESCRIPTION:

GATCCCCCTC CTATCAATCA CCTGATAGCA ACAGGGACAG CTGCCAATAC CCTGCTCTTT 60
ACTCAATGGT ACCCAGGGAG GGAGCATGGG AAGAGGGTGA GCTGAGGGCT GGAGGAGGGC 120
AACAGCCACT GGGTGAGCTG TTCACGGTCT TATACTATTG TTTGTNATTA AAAGTGCTTC 180
AACCCAAA 188

SEQ ID NO:3261

SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03832

SEQUENCE DESCRIPTION:

GATCAACAAG GCCACGCCCT ACAACTACCC AGTGCCCGTC CGTGATGATG GGAACATGCC 60
CGACGTGCCC AGCCACCCCC AGGACCCTCA GGGCCCCAGC CTGGAGTGGC TGAAGAAACT 120
GTGAGCACCT CCACTGACAG AGGCGGCCCC TCCCACGGNT CCCAATAAAA ATGTGAAAAC 180
CAAA 184

SEQ ID NO:3262

SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03833

SEQUENCE DESCRIPTION:

GATCCACCAA TGTTTCAAAT AGGACTATAA CTTATTCAAA GGCCAATNAT ACTTCGCATA 60
ATTCAATTTT AATATTATTC ACATTTTCATG TCACAAATTT AGTAAGTTAC ATGTGTTATG 120
TGATGTTTTG TTTTGATAGA TTATATCTTA CTCCTAAATA AAANGTCAAG ATTTTGTAG 180
CAAA 184

SEQ ID NO:3263

SEQUENCE LENGTH:181

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03835

SEQUENCE DESCRIPTION:

GATCTCTCTG TGTGGAATGC CTTGGTGAGA GAGATGCTTA TAATNACTAT NATNATTTCT 60
 AACCAAGCTT CTATNAATNT AATTTCTAAT AATACACTAT CTTGATTGTA CTCTCCAGAA 120
 AATTTTNTCTG TCAGTGAAAA TAAAAGAAAA ATTAAAGTAA AGCTAAGGAA CTGTCTATAA 180
 A 181

SEQ ID NO:3264

SEQUENCE LENGTH:180

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03836

SEQUENCE DESCRIPTION:

GATCCCTGGA CCATCTGCAT CCAGAGGACC GTCCGTAACG GCCGGGGGTC CAGGCGGACC 60
 TTGTGGTGAC CCGGCTCGGG CNTNTCCTCG GTTTCNTTGC CTCACCCGCG GAGAGCGCTG 120
 AACCTGGACA AGCAGCGGCT GGNAAGNACA GGTCCAATAA ACGCCCTCTG CGCCAGAAA 180

SEQ ID NO:3265

SEQUENCE LENGTH:227

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03837

SEQUENCE DESCRIPTION:

GATCTAGTTC AGAAGGAAGC AAAATCCCTT AATCTATGTG CACCGTTGGG ACCAATGCCT 60
 TAATTAAAGA ATTTAAAAA GTTGTAATAG AGAATATTTT TGGCATTCTT CTAATGTTGT 120
 GTGTTTNTTT TTNGTGTGTN CTGGAGGGAG GGGATTTAAT TTNAATTNA AAATGTTTAG 180
 GAAATTTNTN CAAGGAANCT TTTAATAAN GTATATNGAA AGNTAAA 227

SEQ ID NO:3266

SEQUENCE LENGTH:171

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03838

SEQUENCE DESCRIPTION:

GATCACTTCT CTTGGCTTC CTCTTTTCT GTGCTTGCAT CAGTGTGGAC TCCTAGAACG 60
 TGCGACCTGC CTCAAGAAAA TGCAGTTTTC AAAACAGAC TCAGCATTCA GCCTCCAATG 120
 AATAAGACAT CTTCCAAGCA TATAACAAT TGCTTTGGTT TCCTTTTGAA A 171

SEQ ID NO:3267

SEQUENCE LENGTH:338

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03839

SEQUENCE DESCRIPTION:

5 GATCACTTTA TTTGCTAGGG AGGGAAGTCC TAGGGTGGTT TCAGTTTCTC CCAGACATAC 60
 CTAAATTTTA ACATCAATCC TTTTAAAGAA AATCTGTATT TCAAAGAATC TTTCTCTGCA 120
 GTAAATCTCG CAGGGGAATT TGCACATTA CACTTGAAAG TTGTTATTGT TAACCTTTTC 180
 GGCAGCTTTT AATAGGAAAG TTAACGTTT TAAACATGGT AGTACTGGAA ATTTNCAAG 240
 ACTTTTACCT AGCACTTAAN TATGTATAAN TGTACATAAN GACAANCTAG TAAGCNTGGC 300
 CTGGGGANAT GGTCAAGNCCT TGTNTTGTGT TTTTGGCN 338

10 SEQ ID NO:3268
 SEQUENCE LENGTH:170
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03840
 15 SEQUENCE DESCRIPTION:
 GATCATAGGA GAAAACCAT T CANATGACA AGAGCACCTC AAAGGCAGCA GCCTCAAGGA 60
 GCAGCCATGG CCCAGACTT GTCGCACGGA TGCAGAAAAC TTAATGGAGG AGGCTGAGGT 120
 CAGAATGGGA AGAGTTTTTA AAAAATAAAA AGGGGAGCTA ATATGTGAAA 170

20 SEQ ID NO:3269
 SEQUENCE LENGTH:168
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS03841
 SEQUENCE DESCRIPTION:
 GATCAAGGGC AAAAAGTGGT CATTAAAGTNA TCTAANATTA AATNATTAG CCACTAAGTA 60
 ATTTNTTAC TCTNACTTTA AACTCACCAA AGAAGATTCT TTTAAAGAAA TTATGAAAAA 120
 30 TGTACAATTT AACATTTTAA ATAANTAGTG ACAGANGTTG TTTATAAA 168

SEQ ID NO:3270
 SEQUENCE LENGTH:167
 SEQUENCE TYPE:nucleic acid
 35 TOPOLOGY:linear
 CLONE:HUMGS03842
 SEQUENCE DESCRIPTION:
 GATCCTCCTG CCCAGCATT CCAAAGTGCT GGGATTACAG GTGTGAGCNA CTGCCTGGCC 60
 40 TGGCCGTAGG TTTGTAAGT TTTATAGAA GAGCCCTGGA GAAGACAGTA GAATNAGCCT 120
 ATCTAGTTTA AAAAATAAAG AAGCACGTTG ATTCACCAC CGCCAAA 167

45 SEQ ID NO:3271
 SEQUENCE LENGTH:167
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03843
 SEQUENCE DESCRIPTION:
 50 GATCAGCTTT GTTTTCCCA GAGTTCATGC AAATAGAATC TGGCTTCTNT AAGTNAGCAT 60
 CATGGACTTG GTTNAAATTC GCCCGNTTG CTGAGTGTAT CTTAGCTTG TCCCTTTTAA 120

55

CTGACGAGTA GTATTCCACA GTNTGGATGC ACTGTATTNN NTTTATN

167

SEQ ID NO:3272

SEQUENCE LENGTH:166

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03844

SEQUENCE DESCRIPTION:

GATCAGAGCA TTGTGCAATA CAGTTTCATT AACTCCTTCC CCCGCTCCCC CAAAAATTG 60

AATTTTTTTT TCAACACTCT TACACCTGTT ATGGAAAATG TCAACCTTTG TAAGAAAACC 120

ANANTAAAN TTGAAAANTA AAAACCNATA ACATTTGCAC CAGAAA 166

SEQ ID NO:3273

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03845

SEQUENCE DESCRIPTION:

GATCNTTTTT TTCCTTCT TGTATCATCC CTTTGGGTTT TTCGGTTTGC TTTGGTTTTT 60

AATTTNCTT TGTTTTNCT ATAAATCCTG TTTAATCTT ATAAGGGAAA ATNCATTTN 120

TTCAACTGTN CTAGTTAATA ATGAGAACTC AATTNCTGGA AATNN 165

SEQ ID NO:3274

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03846

SEQUENCE DESCRIPTION:

GATCTCAGGA ATNACATTTT CCAACAGACC AAAAAATGTT TTCATGTAGC AGCAATGCAG 60

ATTTGGTGAA TATTTAATAT ATATTAAGT ATGTATTTC CTTATNACT GACAATNAAA 120

AAATATTGTT TGGCCAAATA GTAAACACCC TTTTGAAACC AAA 163

SEQ ID NO:3275

SEQUENCE LENGTH:163

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03847

SEQUENCE DESCRIPTION:

GATCCCTTNG TTGCTTAAT AAATTATAAA ATAATGGCTT GGAAAAGCAG GCTAGTCTAA 60

CCATGGTGCT ATNATNAGGC TTGCTTGTTA CACACACAGG TCTAAGCCTA GTATGTCAAT 120

AAAGCAAATA CTTACTGTTT TGTTTCTATT AATGATTCCC AAA 163

SEQ ID NO:3276

SEQUENCE LENGTH:164

SEQUENCE TYPE:nucleic acid

EP 0 679 716 A1

TOPOLOGY:linear
 CLONE:HUMGS03848
 SEQUENCE DESCRIPTION:
 5 GATCTGTTCT TGGTATTTNN TTTTGTTTTG TTTTGGTTTT TAAATGTAAT CACCCATTGG 60
 TCAGGCCAG GACTGGTCAC CATGAGCTCT GCTAGCCACG GCCCCAACGA TGCTTCCGGC 120
 TCTCATGGAT TCCACAGCAA ATAAACTGT GCTGACAACA GAAA 164

10 SEQ ID NO:3277
 SEQUENCE LENGTH:162
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03849
 15 SEQUENCE DESCRIPTION:
 GATCTGGGGT CCCTAAGTCC CTCTCTTTAA AGAACTTCTG CGGGTCAGAC TCTGAAGCCG 60
 AGTTGCTGTG GCGTGCCCG GAAGCAGAGC GCCCACTCG CTGCTTAAGC TCCCCCAGCT 120
 CTTCCAGAA AACATTAAAC TCAGAATTGT GTTTTCAGCA AA 162

20 SEQ ID NO:3278
 SEQUENCE LENGTH:162
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 25 CLONE:HUMGS03850
 SEQUENCE DESCRIPTION:
 GATCCTAGGA ACTCCTATNT TCAGAAAAGA ATTTTNTTCC TACTATATAA TTACAGTATT 60
 TAGCTGTCAA TTTTAAGATG AATTTGGTAG AGCCTTATAG TAAAGNATGT ATCTTGGTCA 120
 30 CACACAAAGC TTGAAAAAG TAAAAGATGT CTAACCATA AA 162

35 SEQ ID NO:3279
 SEQUENCE LENGTH:160
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03851
 SEQUENCE DESCRIPTION:
 40 GATCAAGAAG TAGCCGAGGT TGATAAAAC ATAGAACTTT TGA AAAAGAA GGATGAAGAA 60
 CTCAGTTCTG CTCTGAAAA AATGGAAAT CAGTCTGAAA ACAATGATAT CGATGAAGTT 120
 ATCATTCCCA CAGCTGCTCA ATAAAGTACA AGAGCTTAAA 160

45 SEQ ID NO:3280
 SEQUENCE LENGTH:177
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03852
 50 SEQUENCE DESCRIPTION:
 GATCGTGGGT CAGGGACACC GAGAGAGTGA GGTCACCTCC ACTTCAAACC TTCAGTGAGG 60
 GGGTGGGATG GAGAGAATGC TGAATCTTT TTTNACGGG ATGGGGTTT CNTCTTTGTA 120

55

ATTATNNCTT TAGTTTAATT AACCTTTTGG TTGTTTGNC AATATTATAT ATNNNAN 177

SEQ ID NO:3281

SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03853

SEQUENCE DESCRIPTION:

GATCAGGACT ATAATATTGT ACAGTTATTA TAGGGCTTTT GGGGAAGGGG AGGATAGCGA 60
 GAAGATGCTC TGGGGGTTTT GTTTTGCTT TTCCTTCAGG GTTTTATTTT TGA CTGTTTT 120
 GTTTCTNGT NGGCCATTTC TGTATTGCTG GCATCTGTGC TAAGCTTTAC AGTGGCAAAA 180
 ATAATGACAT GTAGCAAAGA TTTTCAAACA AAATATTTT NCCTTTTGTA AA 232

SEQ ID NO:3282

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03854

SEQUENCE DESCRIPTION:

GATCGATGGT GGCCTTTCT CCTGTGCCA CCCGTCTTCA ATCTCTGTC TGCTCCCAGA 60
 TGCTTCTAG ATTCAGTGC TTTTGATTCT TGATTTTCAA GCTTTCAAAT CCTCCCTACT 120
 TCCAAGAAAA ATAATAAAA AAAAACTTC ATTCTAAA 158

SEQ ID NO:3283

SEQUENCE LENGTH:158

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03855

SEQUENCE DESCRIPTION:

GATCTCATCA CAAGATGACC AAAAGAGTTT GAACTGTGTG TGCTATTAG AAGATTTAAC 60
 TTTNATGTAT CTATAGATAC CACAGCTGTT GCTTCTAATA AATTACCTA CCTTTNAACT 120
 GAAAGTTTAA TAAAGCCAAA TCAATTTGAA ATACCAAA 158

SEQ ID NO:3284

SEQUENCE LENGTH:390

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03856

SEQUENCE DESCRIPTION:

GATCTGCCTC ACGTGCACTG TGGTGGCCGT GTGCTACGGC TCCTTCTACA ATCTCCTCAC 60
 CCGAACCTTC CACATCGAGG AGCCCCGCAC AGGTGGCCTG GCCAAGCGGC TGGCCAACCT 120
 TATCCGGCGC GCGCGAGGTG TCCCCCACT CTNATTCTNG CCCTTTCCAG CAGCTGCAGC 180
 TGCCGTTTCT NTCTGGGGAG GGGAGCCCAA GGGCTGTTT TGGCACTTGC TCTCCTCAGA 240
 GTTGGCTTTT GAACCAAAGT GCCCTGGACC AGGTCAGGGC CTACAGCTGT GTTGTCCAGT 300
 ACAGGAGCCA CGAGCCAAAT GTGGCATTG AATTTGAATT AACTTTAGAA ATTCATTTGC 360

TCAACTTGTT AGTGGCCACC TCTTATATTN

390

SEQ ID NO:3285

SEQUENCE LENGTH:156

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03857

SEQUENCE DESCRIPTION:

GATCTCAACA CCTATGCCTC CACGTAAATT ATTTTTTCA GCCTTATTTC CCTCAAAATT 60

GTAGAGTCCT AATCTTCTTC TATCTTGTGG TGTGAGACCT TGGATAAGTC TCCCTTCCAC 120

CTTTTCCTAT TACTTAAAT GGTGAATTTG CATAAA 156

SEQ ID NO:3286

SEQUENCE LENGTH:155

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03859

SEQUENCE DESCRIPTION:

GATCAGGTGA TTTGTAAAT TGTATTATC TGTACATGTA TGGGCTTTTA ATTCCCACCA 60

AGAAAGAGAG AAATNATCTT TTTAGTTAAA ACCAAATTC ACTGTTCAAA NTATCTTCCA 120

ACTTATTTAT TGGGTGTCA CTCAATTGCC CTGTN 155

SEQ ID NO:3287

SEQUENCE LENGTH:137

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03860

SEQUENCE DESCRIPTION:

GATCTTGCAA CTCCATTTCG GAAGACACCG AGGAAGAGGA GGAAGATGAA GACCAGGACT 60

ACAGCTTTCC TATATCTCCT ATTCTAGAGT GGTAAACTCT CTNTAAGTNT TCAGTGTGTA 120

CATAGCCTTT GTGCAA 137

SEQ ID NO:3288

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03861

SEQUENCE DESCRIPTION:

GATCAGTGGG CACAGTTCTT CAGCTACATT GAGACCCTGA AATAACAAT NATATTCTNA 60

CTCGACATCT TGTCCCAAT CCTTCAAAA ATATTGATGG TGATTTGTGC TACCATTAC 120

TCGTTATTT AATAAGACA TTCAATCCCA AA 152

SEQ ID NO:3289

SEQUENCE LENGTH:152

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03862

SEQUENCE DESCRIPTION:

5 GATCAGNATT GTACGTATTC AAGGTGTAAA ATNTGATAAT TTGTCGTACA CGTACATTGT 60
GCAATAACAG TCACAAATNAA TTCCTCAGCG CACCCATCAC CACGAATACG ATACATTAGA 120
TATTCTGAAC TTGCTCATCT TAGGACTTCA AA 152

10 SEQ ID NO:3290

SEQUENCE LENGTH:153

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03863

15 SEQUENCE DESCRIPTION:

GATCATAATA GTGACCAAAA TATACATGCA GACTTGTTTT TTATTATTGT TGTTTAAGCA 60
TAATTTAAGA AAAAAAATTT TTACCTGGTG AACTTGCTAT CTGCTCTGTT TCTAGTTAAA 120
ANATAATANA TNTTATCTNC CCTGTGCTGT AAA 153

20

SEQ ID NO:3291

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS03864

SEQUENCE DESCRIPTION:

30 GATCTTCTTT CTTTTTACAG GAACAATTGG CTTCTTTGCA TGCTTTTGGT TTGTNACCAA 60
AATATACAGT GTGGTGAAGG TTGACTGAAG AAGTCCAGTG TGTCCAGTTA AAACAGAAAT 120
AAATTAACT CTTCAACAAC AAAA 144

SEQ ID NO:3292

SEQUENCE LENGTH:163

35 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03865

SEQUENCE DESCRIPTION:

40 GATCATGGTG AACTTACCAA AGCAAACAAT GCCTGTAAGA TGGTCCTGCA GCAGCCAACC 60
AGTGAACCTT TTTGGTGACA TCCTGTTCTT GTTGATAAAC TTTATATTCC TATAAATCCA 120
TTAAGGCCCC AATAAAGTTT GTCTCTAAGC GCTGTGTTAG AAA 163

SEQ ID NO:3293

45 SEQUENCE LENGTH:149

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03866

50 SEQUENCE DESCRIPTION:

GATCCAAAAT TAGAGCTCAT CAGANTTGTC ATTGAAAGTG TTAACAAAAG TAATATCAAA 60
TGACATTTGA AAAATATCCT TGTAATATGA CTATATTAAT AGGTATAAGG NTTTTCTTA 120

55

TTAATCTAAT AAAATNCCTT AATAGGAAA

149

SEQ ID NO:3294

SEQUENCE LENGTH:157

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03867

SEQUENCE DESCRIPTION:

GATCAGGACA CTTAGCAAAT GTAAAAATAA AATCTAACTC TCATTGACA AGCAGAGAAA 60
 GAAAAGTTAA ATACCAGATA AGCTTTTGAT TTTGTATTG TTTGCATCCC CTTGCCCTCA 120
 ATAANTAAAG TTCTTTTSTA GTTCCAAATT TNAGAAA 157

SEQ ID NO:3295

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03868

SEQUENCE DESCRIPTION:

GATCCGNTAG GAGTAGTAAA TGNGAGACAC AATNGCTTGA TTATACCTCN TATNTGGTTT 60
 AGCTTCAGTA TTAAACAAG GAAATAAACT TGAAAATTAT TTGTCATCAT AAAAATGAAA 120
 CAAANTAAAA TATTTATTGC CAGGNAAA 148

SEQ ID NO:3296

SEQUENCE LENGTH:332

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03869

SEQUENCE DESCRIPTION:

GATCTCAGAG GCTCAGAGAC TGCAAGCTGC TTGCCCAAGT CACACAGCTA GTGAAGNNCA 60
 GAGCAGTTTC ATCTGGTTGT NACTCTAAGC TCAGTGCTCT CTCCACTACC CCACACCAGC 120
 CTTGGTGCCA CAAAAGTGC TCCCCAAAAG GAAGGAGAAT GGGATTTTNN TTTTGAGGCA 180
 TGCACATCTG GAATTAAGGT CAAACTAATT CTCACATCCC TCTAAAAGTA AACCTACTGG 240
 TTAGGAGCAG CAGTGTCTC ACAGTGTGGG GTCAGCCGTC CTNCTTNATN NNNGGCCAAT 300
 GGNTATTGAC ACGTGTNCNN NGTTTGGGCA GN 332

SEQ ID NO:3297

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03870

SEQUENCE DESCRIPTION:

GATCTNCTGT CCTCCTTTCA CTACATACCA ACAACCTCT GGCATTAAAC TTCCAGTGAT 60
 AGTGCTATNA ACTTTGTGTC CTCAGGTCAA CAAGGGACCT CAGTAATNG TTCTNTACAT 120
 AAGTATATAT ATGGGTATTA NTNNGTN 147

SEQ ID NO:3298

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03871

SEQUENCE DESCRIPTION:

GATCGCCCTC TACATGGCTT CGCAGCCCAA AAACAAATNA GTTAGGCTGC AGAGGACTGG 60
 TTTGTTTTTT GGCATAAACC CTTTGAAGTT CCTTTTTCAT TGTAAATTA AAATTTTTTT 120
 NTTNACTTGG ATGGCTTAAC ATTTTNCNA GAAAANTNGG AAGNTATGAA GATGNTGTTT 180
 TGGTTTGTTC ATGAAANGCA TATGGCTTGN CAGAGCTCAT TCGACAGTTA AGGCCATTGT 240
 TTAAGAANC GGTGCTTTC TCTGTGTTG TNCTCCTGAT TTCCTGGAG GTTCTGGATG 300
 AGGGCTGANC ACAGGCTTNG TTANTGTNCA GTCTGTGCTG GGGGNCCTCA GGGGN 355

SEQ ID NO:3299

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03872

SEQUENCE DESCRIPTION:

GATCACCAGG GTCAGTTTNT TTAATAATGG TTTCCAACGT GCCTAATACA TTAAGTAAGA 60
 NTGGNTGATA ACATGACCAG ACAGACATAA AGACCCTGTT GGGGAATNACA TTGAACCTCT 120
 AAAGTCAAGA TTTNTTACAC AANTNTN 147

SEQ ID NO:3300

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03873

SEQUENCE DESCRIPTION:

GATCCGCTAC TAAAAGTAAA AATAACCGGT TTGTAAAACA TTAAGAGAAA AANTAGGATA 60
 TTTAATACAT GTGGTGAGTG GAGANCAGGG TAACTTTAAN TNAAGTTTA AGGCAAATG 120
 TAAGCNCCAC AAGANATATC ANATTTN 147

SEQ ID NO:3301

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03874

SEQUENCE DESCRIPTION:

GATCTAAAAA AATTAAAAAG AAATATGAAT GAAAGNAAAA AAAATGCNAA AATNAGCAGT 60
 TTCCTGGAGG AGCAGTTCCA GCAGGGCAAG CTTNTTGCTT GCNTCGTTTC AAGGCCGGGA 120
 CANTTTGGCC GAGCAGATGG CTATNTN 147

SEQ ID NO:3302

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03875

SEQUENCE DESCRIPTION:

GATCATNTTA TTTTACAATC ATTTATAATG AATNAATGTT NCAGTTAGCT TTAAAAGGTA 60
TACGGTGCTA ATNAGTAAAA TATTGAAGGC AATATTTTAC TGCTAGCTTG CAAAGTTATG 120
AGAGTTTAAA AAATAAAATA TATGAAA 147

SEQ ID NO:3303

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03876

SEQUENCE DESCRIPTION:

GATCTAGGGT CCTGGGTNTC TTGCATTAT ATGTCAGAAA AGGGGCGATA TGCTGCTGAG 60
GGGTGAGTGC ATATAANTNT GGCCTGAGG ACCAGGGCTG GCAGATNTTG TCTACCTGCT 120
GAAGAATAAA ANATTCTTT TGGTAAA 147

SEQ ID NO:3304

SEQUENCE LENGTH:150

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03877

SEQUENCE DESCRIPTION:

GATCTNACCC CCAGCATGAT TGTATTTCTT TCCCCTCCAG TCAAACCGTA ATACAGTTTC 60
CAGAAAAATC GACAGTCTGC AATGCCAAAA GGGTAAAAAT CTGTATTTC AAGTTGTATA 120
GAATAAAGGC TTAGTTAAA ATATTTCAAA 150

SEQ ID NO:3305

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03878

SEQUENCE DESCRIPTION:

GATCTAAAAA TAACTGTAAT TATTTAAATG ACTAANAGGA AAGTACATT TTTAAATNC 60
TGAAAAATTGC CTTNNTGTGT TTATNCAAAAC TGAAAAGCTG AGACCAAGAG CAAGGAAGGT 120
AAAANGTTAA CAGGCAAAACA TTTNCN 146

SEQ ID NO:3306

SEQUENCE LENGTH:143

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03879

SEQUENCE DESCRIPTION:

GATCCTCACC AACCTAAGCA AGAGGAAGTG CCCCTCTCAA CCTGTGCGGG NTGCTGCGTC 60

CCAGGACTGA GACGCAGGCC AGCCCCGGCC CCTAGCCCTC AGGCCTTCTT TTTTATCCAA 120
ATAAATATTT CTTAATAAGG AAA 143

5

SEQ ID NO:3307
SEQUENCE LENGTH:143
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS03880
SEQUENCE DESCRIPTION:
GATCAACAAG AGCACTGTAC TCCTGGCAAT NATTACATAT GTNAGAACAT GGATTTTGCA 60
CTGTAGACAA CATTAAACAC CAGTCTATGG GGTACTGCAT TGCTTTTNAT AAAGTTCAAA 120
ATAAAGATTT ATTTTCAAAC AAA 143

15

SEQ ID NO:3308
SEQUENCE LENGTH:142
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS03881
SEQUENCE DESCRIPTION:
GATCCCTTTA CTGGAGCCCA GTATGTGCTG TGTGAGTTAG AAGTCATTCT TGCTGAGAAG 60
GTGAATAGGT AGGGATTTCG CTTGTTTTGT AAGTCTACAA TTTGCCAAGA GTAAATAACA 120
CTGGACCAGC TGTAAGTA AA 142

25

SEQ ID NO:3309
SEQUENCE LENGTH:142
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

30

CLONE:HUMGS03882
SEQUENCE DESCRIPTION:
GATCTGCACA TTTAATCGTG GCTGTTTCTG TATAGCCTAT ACTGCATTAG CCNAAGANAT 60
TGTTGCTTTG TAACTTTTTG CACTATTGTT TTGGCTGGAT TTGTATTACA CACAGTTTAA 120
AAAAAACA AA 142

35

SEQ ID NO:3310
SEQUENCE LENGTH:141
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS03883
SEQUENCE DESCRIPTION:
GATCCCTAAG CCCCCAGCT GTAAATAGGC TGTGGCCAGT GCCTGGTCAT NAGAAGAGNG 60
AGGAGGAGCC CAGGCGTCTG TTTATGTATT TATTTATTTA TTTATTATAC CTATTAATAA 120
AAAAGGTGCT CAGCCTCCAA A 141

45

SEQ ID NO:3311
SEQUENCE LENGTH:139

50

55

SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03884
 5 SEQUENCE DESCRIPTION:
 GATCTTGGCC TTCGCAGTGC CCAGTGATGG CATTACTCTG CACTATAGCC ATTTNCCCCA 60
 ACTTAAGTTT AGAAATNACA AGTTTCAGTA ATAGCTGAAC CTGTTCAAAA TGTTAATAAA 120
 GGTTCGTTG CATGGTAAA 139
 10
 SEQ ID NO:3312
 SEQUENCE LENGTH:138
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS03885
 SEQUENCE DESCRIPTION:
 GATCTGGAAG ACAAGTAACA TCTTCCTTTT NTTGGTGCTC GCCTGCCGTG CTCTAGGTGC 60
 TTTTAGAGAT GCTGGTCTGT GTGCTAGGGA AGCGATGAAC CATACTGTTA GTCTATTAAA 120
 20 CATAACTCAA CCTGGAAA 138
 SEQ ID NO:3313
 SEQUENCE LENGTH:138
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS03886
 SEQUENCE DESCRIPTION:
 GATCTATCTC TGTGTCCAAG TCTCCTCTT TTATAAGGAA ACCAGTCATA ATGGACCCAC 60
 30 CTGAATNACC TCATTTTAAC TTGATTACCT CTGTAAAAAA TGTATTTCCA AATAAAGTGA 120
 CCTTATGAGG TATTGAAA 138
 SEQ ID NO:3314
 SEQUENCE LENGTH:136
 SEQUENCE TYPE:nucleic acid
 35 TOPOLOGY:linear
 CLONE:HUMGS03887
 SEQUENCE DESCRIPTION:
 GATCAACAAA TCTCCTAGGC CTNTNACCAC ATACATTAC ACCNACTACC NCAACTATCC 60
 40 ATAAATCTAA GTATAGCCAT TCCACTATNA GCTGGAGCCG TAATTACAGG CTTCCGACAC 120
 AAATAAAAA GCTAAA 136
 SEQ ID NO:3315
 SEQUENCE LENGTH:139
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03888
 50 SEQUENCE DESCRIPTION:
 GATCCACCT TCAACACCTT ACAAGTAAAG CCAATGAAGN ACAGTTGAAA CATGCAAAAT 60
 55

EP 0 679 716 A1

ATGGNGCTTT TCATGTAATT ACTCTTTTAC TGTTTACCAT TCACTATAAT TCACAATTAA 120
AATTGTGTGN CTANACAAA 139

5

SEQ ID NO:3316
SEQUENCE LENGTH:133
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS03889

SEQUENCE DESCRIPTION:

GATCTGTGTA GTTAATGTAT TTATTAATGC TTGACTTTTA AAATCCTGGG CATAAATAGT 60
GCAGAGCCTC GTATGTTTGT CAGTTCATGC CGAGATGAAA TAAATCACGC AGAAAGTGCC 120
AGTCCTCCTG AAA 133

15

SEQ ID NO:3317
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

20

CLONE:HUMGS03890

SEQUENCE DESCRIPTION:

GATCTGTGGA GTGTGTGTTT CAAAGAGAGA ACTACAGAAA TTTTAAAGCA GGAAACCTG 60
AATGTNATGT GCACATTTTC ATCCACATG GACAATGTAT GTGTTTAAAT AAATGGAATT 120
TTCAGATTCA AA 132

25

SEQ ID NO:3318
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03891

30

SEQUENCE DESCRIPTION:

GATCAAATGT GGGCCCGTTT TTGGCCGCCG CCGCCCTGCC CCGTCCCTNC GGCCACCACC 60
TAATTANTTG CCGTGCTTCC TGCTGCTGTA ACTGCTTTNT TACCTTTCCA ATAAAGANTT 120
TCTTGTTTTA AA 132

35

SEQ ID NO:3319
SEQUENCE LENGTH:132
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03892

40

SEQUENCE DESCRIPTION:

GATCATTATT ATTGTAATAG TCTCATGTTT AAATGGGATT ATATAATGAN AACAGTTTAA 60
AGAAAATNAT AATCTTATAT NTCAAATGTG GATGCATATA ACCTGTNAGT GAAAAANCAC 120
TGANTGATTT AN 132

45

SEQ ID NO:3320
SEQUENCE LENGTH:131

50

55

EP 0 679 716 A1

SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03893

5 SEQUENCE DESCRIPTION:
 GATCATATTG CTGTAAC TTC TTTAAGTAG TTGATGTGGA AAACATTTTA AAGTGAATTT 60
 NTCAAAATNC TGGTTTTGTG TTTTATCCAA CTTTGTGCA TATATATAAA GTATGTCATG 120
 GCATGGTTAA A 131

10 SEQ ID NO:3321
 SEQUENCE LENGTH:131
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

15 CLONE:HUMGS03894
 SEQUENCE DESCRIPTION:
 GATCCTCAGT GTAGTTCTGA AACTAAGACT ATAGATATTT NNTTCTTTT AATTTCTCTT 60
 TATACTAAAG AATCCAGAGT TGCTACAATA AAATAAGGGG AATAATAAAC TTGAGAGTGA 120
 ATAACCATAA A 131

20 SEQ ID NO:3322
 SEQUENCE LENGTH:131
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

25 CLONE:HUMGS03895
 SEQUENCE DESCRIPTION:
 GATCTTAGAG TTGCACAGC TTAATAAAAT GGAAATATTG GAATCTGAAT CCAAAACAGC 60
 CTGA CTCAAA ACAATGTNCT TNCCATTATG CAAGGGAAAA AAAAAANGGT TGGGTNTCAG 120
 NGNGAGGGTA N 131

30 SEQ ID NO:3323
 SEQUENCE LENGTH:433
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

35 CLONE:HUMGS03896
 SEQUENCE DESCRIPTION:
 GATCATAGTC TTAGGAGTTC ATTTAAACCA TAGGAACTTT TCACTTATCT CATGTTAGCT 60
 GTACCACTCA GTGATTAAGT AGAACTACAA GTTGATAGG CTTTATTGTT TATTGCTGGT 120
 TTATGACCTT AATAAAGTGT AATTNTGTAT TACCAGCAGG GTGTTTTTAA CTGTGACTAT 180
 TGTATAAAAC CAAATCTTGA TATCCAGAAG CACATGANGT TTGCAACTTT CCACCCTGCC 240
 CATTTTTGTA AACTGTCAGT CATCTGGAC CTTTTAAAC ACAAATTTTA AACTCAACCA 300
 AGCTGTGATA AGTGAATGG TTA CTGTTTA TACTGTGGGT ATGTTTTTGN NTTACAGCAG 360
 GTTAATGCTT TCTTTTCCA GGTGNCCTT TGAGGATTNA GGGAAAATTA NATAACTCTT 420
 TGTACAGTTC AAA 433

45
 50 SEQ ID NO:3324
 SEQUENCE LENGTH:129

55

SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03897
 5 SEQUENCE DESCRIPTION:
 GATCCACCCA CCTCGGCCTC CCAAAGTGCT GGGATTATAG GTGNNAGCCA CCGCGCCGGG 60
 CCGGTTGCTG GCATCTTAAT GTTCTGTAGG TGAATATTT CCAATAAACA CAAGGTGCCG 120
 TAATTGAAA 129
 10
 SEQ ID NO:3325
 SEQUENCE LENGTH:129
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 15 CLONE:HUMGS03898
 SEQUENCE DESCRIPTION:
 GATCTGGTAA ACTTNNAATC AATTAAATTA ATGCANCAAT AGATTATNAA TATTAAGTGA 60
 CCATTAAAGT TTTTNAATAA GTTTTTTACA AAGAAAAGTT AACATTAAA AAGAATTACA 120
 20 GCTTTCAAA 129
 SEQ ID NO:3326
 SEQUENCE LENGTH:128
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS03899
 SEQUENCE DESCRIPTION:
 GATCTGGAAA TTTTTAATC AGTTAAATTG TGCAGCAATA GATTTTTAAC TTAACTGAC 60
 30 CATTAAAGT TTTNAATAAG TTTTTTACA AAGAAAAGTT AACATTAAAA AGAATTACAG 120
 CTTTCAA 128
 SEQ ID NO:3327
 SEQUENCE LENGTH:127
 35 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03900
 SEQUENCE DESCRIPTION:
 GATCCTGTAG TGCCTCTATA GAAGTACCCA CAGAAAGTAA AGTATCACAT TTATAAATAC 60
 40 CAAAGATGTA ACAATTTTAA AATTTTNTAG ATTACTCAA TAAAGTGTTT TAAGTTTTC 120
 TATGAAA 127
 SEQ ID NO:3328
 45 SEQUENCE LENGTH:131
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03901
 50 SEQUENCE DESCRIPTION:
 GATCCATCGC GATACTATGT GTGCATTATT TGAAAGTTAT TGAAATTTT ATTCAAACCG 60
 55

TGGAACAAAT GTATGTNATT TTTTATACT TCTTAATTTA AATAAAATAT TTAATGCACT 120
 ATTAATAA A 131

5 SEQ ID NO:3329
 SEQUENCE LENGTH:123
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 10 CLONE:HUMGS03902
 SEQUENCE DESCRIPTION:
 GATCAGCCCT TTGTACAGAA AAATGTGTCT ATAAAAATTA TGTGTATTT AATTCTGATA 60
 CTTTTGGCT TGTAATAGC TTCTGAACT TTTACAATA AAAATGTTT AGAACTGTT 120
 AAA 123

15 SEQ ID NO:3330
 SEQUENCE LENGTH:123
 SEQUENCE TYPE:nucleic acid
 20 TOPOLOGY:linear
 CLONE:HUMGS03903
 SEQUENCE DESCRIPTION:
 GATCATGACC GGAACATGGN CTGGGTTTCC ACCCAGCTCC AGGCCACATG CAATGTCCAC 60
 25 AAGTNTGCCT TCAATNACTG GTTCAGTGA CACCTCACT TCCAGATTGA GCACCATCTN 120
 NNN 123

30 SEQ ID NO:3331
 SEQUENCE LENGTH:205
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03904
 SEQUENCE DESCRIPTION:
 35 GATCGATTCA ATGCCCGATG CTTCTGTTTC ATTCCCGACC CTTTCTACTA TGCATTTCCT 60
 TTTTATCAGG TGTATAAAGT TAAATACTGT GTATTTATCA CTAAAAAGTA CATGAACTTA 120
 AGNGNAACT AAGCCTTTCG TGTTTTTCCA NAGGNCNGCN NGGCTTCTNT GTACAGTTGG 180
 AATAACAGA CAGCAAAATG GTAAA 205

40 SEQ ID NO:3332
 SEQUENCE LENGTH:122
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 45 CLONE:HUMGS03905
 SEQUENCE DESCRIPTION:
 GATCCTCAGG CGGCCCCAC CAGGGCACAC CCTACTGTCC TTGTGCCTCA CGCCCCCTCC 60
 TCATCCTGCA CCCCTTCCAT CCCACCTTCC CTTTCAATAA ACAGCTGGGA TGGATACTGA 120
 AA 122

50
 55 SEQ ID NO:3333

SEQUENCE LENGTH:120
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03906
5 SEQUENCE DESCRIPTION:
GATCTGATTT TTCCCCCTT TACCTAGCTG TGCCCCCTCT GGTATNTAT TTCCTTAGTG 60
CCAGGAGGGC ACAGCAGGGG AGCCCTGATT TTAATAAAT CCGGAATTGT ATTTATTAAA 120

10 SEQ ID NO:3334
SEQUENCE LENGTH:119
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03907
15 SEQUENCE DESCRIPTION:
GATCACCAGT GCATCCTTCA TCACAGCATG TGCAATATGC CAAGATTACC CTCGGTCATT 60
CCTGTCAACA AGGGGTCAAT GTCATAAATG TCACAATAAA ACAATCTCTT CTTTTTAAA 119

20 SEQ ID NO:3335
SEQUENCE LENGTH:119
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03908
25 SEQUENCE DESCRIPTION:
GATCCATGAG GAAAAGATGC TCTCCACCT AAGGCCAGGA ATCTGAGAGC AGGACTGGCT 60
GAGCTCCCAG GGCAAGGGGT TCACTAATGC TTATCAATAA AGAATATTGA GCCTGGAAA 119

30 SEQ ID NO:3336
SEQUENCE LENGTH:273
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03909
35 SEQUENCE DESCRIPTION:
GATCAGATTG CATGTNACTC TNAAGCTGAC GAACTTCCAT GGCCCTCATT AATGACACTT 60
GTCCCCAAAT CGAACCTCC TCTGTNAAGC ATTCGAGACA GAACCTTGTT ATTTCTCAGA 120
CTTTGGAAAA TGCATTGTAT CGATGTTATG TAAAAGGCCA AACCTCTGTT CAGTGNNNNT 180
40 AGTTACTCCA GTGCCAACAA TCCTAGTGCT TTCCTTTTNN AAAAATGCAA ATCCTATGTG 240
NTTTTAACTC TGTCTNCACC TGATTCAACT AAA 273

45 SEQ ID NO:3337
SEQUENCE LENGTH:119
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS03910
50 SEQUENCE DESCRIPTION:
GATCACCATG AACAAAGNTA TATTTCTAT TTATTTATTA TATGTGCACT TCAAGAAGTC 60

55

ACTGTCAGAG AAATAAAGNN TTGTCTAAAT GTCATGTTGG AGATNCCTTT GCATNCTTN 119

SEQ ID NO:3338

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03911

SEQUENCE DESCRIPTION:

GATCAGGACT TCAAGGGCCA GACCACAGAC TACTTATAGG AGCATCTTCA AGGCGGTCAC 60
AGTGAAAACC TTGAAATGGC CTTTTTNAAT ATATATAANT AANTGTNAAT ATTATTNN 118

SEQ ID NO:3339

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03912

SEQUENCE DESCRIPTION:

GATCCAAATN ATGGCCACAG ATGAACTTCC ATGCAAGCNA TGGCTGAGTT TCATTGCTTA 60
AAATNCTCCT CTGTTTAGAG GGGCCTGGTA GAAATAAAAA CCCACCCTAT ATCTTAAA 118

SEQ ID NO:3340

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03913

SEQUENCE DESCRIPTION:

GATCCTCCTG GCCGCCCCGC AGGTCTNTGG AAGGGCTGGA CGGCAAGTCC GTNTAGCTCA 60
CGGCCCCCTC CAGTGGAATG GNTCTTTCCG GTGGAGATAA AAGTTGATTT NCTCTAAA 118

SEQ ID NO:3341

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03914

SEQUENCE DESCRIPTION:

GATCCCAGGT GCGTGTNTCT CTGTCTCTCC TAGCCCCTCT CTCACACATC ACATTCCCAT 60
GGTGGCCTCA AGAAAGGCC GGAAGCGCCA GGCTGGAGAT ANCAGNCTCT TNCCCGTCGG 120
CCCTGCGTCG GCCCTGGGGT ACCATGTGGC CAAACTGCT GTGGCCCCCT GTCCNNAAGA 180
CACTTCCCCT TGTNTCCCTG GTTGCCCTCTC TTGCCCTTG TCCTGAAGCC CAGCGACACA 240
GAAGGGNGNG GGGCGGGTCT ATGGGGGAGA ANGGGAGCGA GNTCAAGAGG TGGGCATGGG 300
TTTGNAAGG GTNGGCGTTT GGGGGGCCN TNATGNTGGC TTTTCAANC N 351

SEQ ID NO:3342

SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03915

SEQUENCE DESCRIPTION:

5 GATCATGCCG CTGCACTCCA ACCTGGGCAG CAGTGCAAGA CTCTGTCTCA AAAGGGGAAA 60
AAAAAAAANT TNCTGATGTG NCCCATGAAG GGACCTCATT TNCCTCGNAA TTTTGGN 117

SEQ ID NO:3343

10 SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03916

SEQUENCE DESCRIPTION:

15 GATCGGCCGT ACCAGCCGCC CCGCCCGCCG GTGGGCGCTC TCGGACTACT CGCTGTACTT 60
GCCGCTCTGA GTCAGTGGCC CCTTCGTTCC TTGTAAATAA ATCCCGCCCC CGGAAA 116

SEQ ID NO:3344

20 SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03917

SEQUENCE DESCRIPTION:

25 GATCCAGACA AGTGGGAGAG CCCGTGGGGG CAGGGGACCT GGAGCTGCCA GCACCAAGCG 60
TGATTCTGCG TGCCTGTATT CTCTATTCCA ATAAAGCAGA GTTGACACC GTCAAA 116

SEQ ID NO:3345

30 SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03918

SEQUENCE DESCRIPTION:

35 GATCTCATAA GAAATGTAAT ATGTAAATAA TATCTTGCTT TATGTTGTAA AATATACATT 60
GTTTGCNCTA GAATAGAAAT AATTCTTTT CAATAAAAAG AAAGAAGGAC TCTAAA 116

SEQ ID NO:3346

40 SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03919

SEQUENCE DESCRIPTION:

45 GATCGTTGTG TTGTTATTTT ACTGCACTTT TTACTTTTTT NCGTGTGGAG CTGTATTCCC 60
GAGACCAACG AAGCGTTGGG ATACTTCATT AAATGTAGCG ACTGTCAACA GCGAAA 116

SEQ ID NO:3347

50 SEQUENCE LENGTH:116

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03920

SEQUENCE DESCRIPTION:

5 GATCAAGGCC AAATAACCCG ATTTGGTTTG GGCACCTCAAG CAATAGTAAA GCCTGTAAGA 60
CATGATAGGA TTATNTTCCC CTTTGGATTT AAATNTAATA TAGCAGTTGG ATTAAA 116

SEQ ID NO:3348

10 SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03921

SEQUENCE DESCRIPTION:

15 GATCTGTAG ACCCTTTCTT TTGGCCAATT TCCCCCTTTT TGGGATGGAA ACATTTACCC 60
AATCCCTATA CCCCATTGT ATCTTGAAG TAAATAATTT GTTTTGATT TTAAA 115

SEQ ID NO:3349

20 SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03922

SEQUENCE DESCRIPTION:

25 GATCTCTTCA CTGTNAAAAG TTGCCCGGGT GCAGCGCCTT TCCCTTCTAN CATGGGAAAT 60
GCAGGCTGGG CCCTTGGGNT NAGCCTGCGG GGCTCTGGTG CTGTCCCCGA CCCNN 115

SEQ ID NO:3350

30 SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03923

SEQUENCE DESCRIPTION:

35 GATCCACTGT TTGCAGCAGA ATTATATATA TGTATAGGAA AAATCCACTT TGAATAATCC 60
ATGTTTTGTA TTGGAAATT GTTTTTAAAA ATAAAAAGGA AAGGAAATAT AAA 113

SEQ ID NO:3351

40 SEQUENCE LENGTH:113

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03924

SEQUENCE DESCRIPTION:

45 GATCTAGGCA GTGGGTAAAG CCAGACCCCT AAAAGTGACC CTTTCCTCTT CTGCCCTATT 60
CTNCTNAGAC CCTCAGAAAG NNNTCCAATT TTTTAAATC CCTGTAGCTC CAN 113

SEQ ID NO:3352

50 SEQUENCE LENGTH:117

SEQUENCE TYPE:nucleic acid

55

5 TOPOLOGY:linear
 CLONE:HUMGS03925
 SEQUENCE DESCRIPTION:
 GATCTGATGA ATTGGTTTT GAATCCCAGA AANGGTCTGC CATGGAGTTG GCAGTCATCA 60
 CGGTAGATGG CGTATGATTT TCCTGAATTT TAAATAAAAT GAAAACCATA AATTAAA 117

10 SEQ ID NO:3353
 SEQUENCE LENGTH:112
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03926
 SEQUENCE DESCRIPTION:
 15 GATCAGAGCT GTTAGGTAAA GGCCTAACCA CCTCCCTGCA GNCTCTTAAN TCTCAAGCTT 60
 TAGGAACCCA TTTCTAAANG TACTAGTAGG GAGANTTTAT ATTGTCAGCC NN 112

20 SEQ ID NO:3354
 SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03927
 SEQUENCE DESCRIPTION:
 25 GATCACGGTA CGTCCATAAA GCCAGTATTA CACTTAAATN NAGTATTCTT TTTTGAATC 60
 GTTTTTTTTA GAAGGTAAAC AAATTTAATA AAGCTACCAA TAATGTTGAA A 111

30 SEQ ID NO:3355
 SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03928
 SEQUENCE DESCRIPTION:
 35 GATCTAGAAA NTGCCCTCCT TATACCCCTA CCATGAGCCC TACAAACAAA AAACCTGCCA 60
 CTAATAGTAT GGTATCCCT CTNANTAAAN CATCATCCTG GCCCTAAGGN N 111

40 SEQ ID NO:3356
 SEQUENCE LENGTH:111
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS03929
 SEQUENCE DESCRIPTION:
 45 GATCTTTGCA ATTNAGGNT TAGCCACGTG GCTTGCTTCA GCNAGTAATG TGAATGGAAA 60
 TAACGTGTAT CANTGCTGGA TAGAAAACCTT AANAGCCAAC ACATGTTCC N 111

50 SEQ ID NO:3357
 SEQUENCE LENGTH:110
 SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS03930

SEQUENCE DESCRIPTION:

5 GATCCCGTAG AATATATATT TAATAATCCC ACAAACGGAG GCCAGACTTC TGC GTTAACT 60
TCAGTAACAC AAGCTTCTTT AAGCCAAATA CATCACTTGC CACTACCAAA 110

SEQ ID NO:3358

10 SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03931

SEQUENCE DESCRIPTION:

15 GATCTCCGTG GTGGTCGTGG GCCGCCAGGT GAATNANCCC CACATCCGCN TCCTGGTCAC 60
CGGCAAGACG GCCGAGTACG ACGTGGCCTA CGGCGAGAGC ACCTNTNCCN 110

SEQ ID NO:3359

20 SEQUENCE LENGTH:115

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03932

SEQUENCE DESCRIPTION:

25 GATCCTTCGA AGCACTCAGT TCACTCTTCC CCACCACAGT GGTTAAAAGG CGTTTGTATC 60
TGCCACTATG TGTGTGTTTT AAAATAANCT TTTGGAAACA TGTTGGNGN GNAAA 115

SEQ ID NO:3360

30 SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03933

SEQUENCE DESCRIPTION:

35 GATCCACTAA TGTAGCTTAA GGTTATTAGN TTTGGGCTTT TAATCATGGN ATAATCTTAT 60
GTATTGGTGT AAGAGTTGAT GAATGACTTT AGCTGTGTGA ATATATAATA GTCAAAGTGC 120
AAACATTTTG CATCCCTTTT GTGACCTAAT TTACAGNCAT TTAAATTGTG TTGCAGTTCT 180
GCTTTGCCGT TTAATAAAAA GCTATTTTCA NAAA 214

SEQ ID NO:3361

SEQUENCE LENGTH:110

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS03934

SEQUENCE DESCRIPTION:

50 GATCANAGAT TTCAATNACA GTGCAGGAAA GCAGCACTGA GAAACTTTTA ATTGTNTTNA 60
ATTCTNCTT TAATGTTTCA ACCACCACAT TCCCATTCAC TTTAATTTTN 110

SEQ ID NO:3362

55

SEQUENCE LENGTH:108

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03935

SEQUENCE DESCRIPTION:

GATCTTCCCC TGACCTGCTC CCAGGGCTAT AACAGATACG GACTTTGAAA CTGTATGGAG 60
TATAGAGCAG TGCTCTATAA TTAAATAT ACATATATTG CAACCAAA 108

SEQ ID NO:3363

SEQUENCE LENGTH:363

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03936

SEQUENCE DESCRIPTION:

GATCTTCAGC TTGGTAGATT TAATTGCCCA GTGAATGGCA CTTACGTTTT CATTTTNNAC 60
ATGCTAAAGC TGGCAGTGAA TGTNCCAATG TATGTCAACC TCATGAAGAA TGAAGAGGTC 120
TTGGTATCAG CCTATGCCAA TNATGGTGCT CCAGACCATG AAAGTGTAG CAATCATGCA 180
ATTCTTCAGC TCTTCCAGGG AGGCCAGATA TGGTTACGNC TGCACAGGGG AGCAATTTNT 240
GGAAGTAGCT GGGAAATATT CTACGGTTTC AGGCTATCTN CTTTATCAA GGTTTGAATG 300
TCAGTNCAGT NTTTGACNAC TAAAAGGNNT NGGGGTNCTA ATTANGTNGG GTTTGAAGGG 360
TAN 363

SEQ ID NO:3364

SEQUENCE LENGTH:106

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03937

SEQUENCE DESCRIPTION:

GATCTGGGGA GTNTNAGGAG AGGGTGGCAT CAGNAGCTGC TCAGGCTTGG CGGAGGGAGC 60
GGCATGGCCG ATGTCACTCA GCCCCTTCCC GGTCCGCCCN NTTCCN 106

SEQ ID NO:3365

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03938

SEQUENCE DESCRIPTION:

GATCGTTTTT TCCAGAGTCG CGGGGACACA GGAGTNTTCC TACAGTACAT NCACGCCCGC 60
NTCCACAGTT TGGAAGAGAC TTTTGATGT GGTACNTGA NTGAN 105

SEQ ID NO:3366

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03939

SEQUENCE DESCRIPTION:

GATCATCTAA AAAATGCCAT GANTGGAAAT NCGAAGGCC AGACACCAAT ATTCNTAGA 60
 AGTAAACAGC TCAAAGACAC TCTCTATCT NAGGAAATNA ATGTN 105

5

SEQ ID NO:3367

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS03940

SEQUENCE DESCRIPTION:

GATCCAGTGG GGTCCGGACA CTGGGCCCCG CAGCGAAAGC ACGNTCCAGC CACCAGGAGG 60
 CCACCTATTN TTCAAATAA AAGACTGCGT TCCTCTCTTG GAAA 104

15

SEQ ID NO:3368

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03941

SEQUENCE DESCRIPTION:

GATCAAAAAA GAAGAGTTAA AACACACAT GTAAATNCCT TTTAATATTT NATGGGAATG 60
 CCTCTCATTT AAAAATAGAA ATAAAGCATT TTGTAAAAA GAAA 104

25

SEQ ID NO:3369

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03942

SEQUENCE DESCRIPTION:

GATCCTTTAT CTTTCCATAT GGCACACGTA AGAAAGTGTT TTTCTACTAT TAATATTAA 60
 TTAAACCTT TACTTNTGTA TAATAAATNA AAATCAGAA TAAA 104

35

SEQ ID NO:3370

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03943

SEQUENCE DESCRIPTION:

GATCTGGAAG AGGCTTGTA CCTGAACTAN TATGTAGGAA GGCAGTACNA NCAGCCCACC 60
 AGTGTAATCT CCCTGNATTA AGGCATTCTT AAAAATTAG GCNN 104

45

SEQ ID NO:3371

SEQUENCE LENGTH:104

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS03944

55

SEQUENCE DESCRIPTION:

GATCCGCTCT GGTCAAACCC TTCCAGGCCA GCCAGAGTGG GGATGGTCNN TNACCTGCTG 60
GGAAGGCANN CTGATGGGGC ACACCTTGG CCTCTCGTCC ACGN 104

5

SEQ ID NO:3372

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS03945

SEQUENCE DESCRIPTION:

GATCAAAATT TTTTGATAAT TTA AAAATTG TGTGTGATTT TNA AATTNA AGAAATTGCT 60
GAAACTTAG AAAATATAA TGGTATACAT ACAATAGNNA AA 102

15

SEQ ID NO:3373

SEQUENCE LENGTH:105

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03946

SEQUENCE DESCRIPTION:

GATCAATAAT TTAAATGTAA CTAGTTGGGA TTTTATAGTT AAAATNATAT TTGTGTATAT 60
AACATAACTA ATCTGTAAAT NGTAATAAAT ATATTTNCAA TTA AA 105

25

SEQ ID NO:3374

SEQUENCE LENGTH:99

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03947

SEQUENCE DESCRIPTION:

GATCATTTAG TACTTTTGTN TTCTCCCATG TGCTTGAAGG AAAAATAAAG TGCTACTACC 60
GTATTTNTTG TTTTCATCAA AAAATAAAAA TAATTTAAA 99

35

SEQ ID NO:3375

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03948

SEQUENCE DESCRIPTION:

GATCTTTAGC ACAGTGATAT NACCATGACT TCACAGACAT GGTCTAGAAT CTGTACCCTT 60
ACCCACATAT GAAGAATAAA ATTGATTAAA GGTAAA 97

45

SEQ ID NO:3376

SEQUENCE LENGTH:97

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS03949

55

SEQUENCE DESCRIPTION:

GATCAATAAT AATNAGGAAA GCATGATATG TATATTGCTG AGTTGAAAGC ACTTATTGGA 60
 AAANATTAAA AGGCTAACAT TAAAAGACTA AAGGAAA 97

SEQ ID NO:3377

SEQUENCE LENGTH:94

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03951

SEQUENCE DESCRIPTION:

GATCCCCCTC CTTCCCCCTC TCCCCATTGT ATTTATTTGC CTGCTGGAAA ATNACATCCG 60
 GAAATAAAAT AGAAATATGT CTTTNTATT TAAA 94

SEQ ID NO:3378

SEQUENCE LENGTH:93

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03952

SEQUENCE DESCRIPTION:

GATCCTAAAC TTTTGGATA ATCTTTTATA TTTNTAACCT TTGAATTTAA TCATTGTNCT 60
 NAGATTAAAA TAAAAATGC TATTGAACT AAA 93

SEQ ID NO:3379

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03954

SEQUENCE DESCRIPTION:

GATCTGGAAA TCCCTGCTGT AATCTTTTAA AGGGAATCCA CTGGAATATA TTAGTTTTTG 60
 TTTTAAATAA AACCATTCTT TACTTAACAA A 91

SEQ ID NO:3380

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03955

SEQUENCE DESCRIPTION:

GATCTATGGC CTCTGGTGCT TTGTCCTGTA TTGGGTTTAA TTTTTTTGTC CTAATCTCTT 60
 CAATCAATAA AATTGTGCGT ATTAACTAA A 91

SEQ ID NO:3381

SEQUENCE LENGTH:91

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03956

SEQUENCE DESCRIPTION:

GATCAACTNA ATGTTTAAGA CTTTAGATGT CTTGTATTAA AAATTACACA AAAAAAGTAA 60
 AACTTTTAT ACTTACCCTT TTAACCTAA A 91

5

SEQ ID NO:3382

SEQUENCE LENGTH:90

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS03958

SEQUENCE DESCRIPTION:

GATCTCTGTA ATNTTATNTA GAGTTTGAGC TGAAGCCCCG TATATCTAAT NTATTTTGT 60
 AAACATGAAA GTGCATCCTT TCCCTCCAAN 90

15

SEQ ID NO:3383

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03959

SEQUENCE DESCRIPTION:

GATCATACCT ATTAATAA TGCCAAACAC CAAATATGAA TTTNATGATG TAACTTTGT 60
 GCTTGGCATT AAAAGAAAA AACACAAA 88

25

SEQ ID NO:3384

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03960

SEQUENCE DESCRIPTION:

GATCAAGAAG ACGNNTAAGG GAAGAACGTA CACAGTGAAA ANCCAAAAA AGAAAAAAT 60
 GTTATACAA CCCTAAGTCA ATAACCTN 88

35

SEQ ID NO:3385

SEQUENCE LENGTH:87

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03961

SEQUENCE DESCRIPTION:

GATCTAGGCA CACCTNGCTC TTNGCTGCAT GTGGTTATNA ACANCTTCCA GTGGAAGTCG 60
 AATAAACAGT TTTTGGTAAA TCTCAAA 87

45

SEQ ID NO:3386

SEQUENCE LENGTH:85

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS03962

55

SEQUENCE DESCRIPTION:

GATCCTGCCC TGAATCTCCA TAGTCTCCAC TGTGAACTGA GGAGGGGAGG GGTGTGCTGG 60
 GGAATAAATC TTGTATGAGA ACAA 85

SEQ ID NO:3387

SEQUENCE LENGTH:84

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03963

SEQUENCE DESCRIPTION:

GATCCATTTA NAGGCCAAAT NTCATTCTGC AGGTGCCTTC CCGATGGATT AAAGGTGCTT 60
 ATNTTTTTTT AAGTTTNAAG TAAA 84

SEQ ID NO:3388

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03964

SEQUENCE DESCRIPTION:

GATCGTGTTT ATTTGNTTT CCGATTCTAG ATATAAGTTT TGNATGGGCA GGAAGACTAA 60
 AATAAAAGTT TTTAAGGTAA A 81

SEQ ID NO:3389

SEQUENCE LENGTH:81

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03965

SEQUENCE DESCRIPTION:

GATCTCCAGA TGTAATTTC CCTCTTAAAT TTAAANTAAT NTAAAGATTA CTAACAAT 60
 AAAANCTCCT AAAAANTCAA A 81

SEQ ID NO:3390

SEQUENCE LENGTH:88

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03966

SEQUENCE DESCRIPTION:

GATCTTTCTT TCCAAAACAT TTCTGGACAG TACCTGATTG TATTTTTTTT TTAAAAATAA 60
 AAGCACAAGT ACTTTNGNGN TTGTTAAA 88

SEQ ID NO:3391

SEQUENCE LENGTH:76

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03967

SEQUENCE DESCRIPTION:

GATCCCCCA CAGCCCCTGG TCAGTCTGCC CTTGTCCTG GTCTGAGGTC ATTAAAATTA 60
CATTGAGGTT CCTAAA 76

5

SEQ ID NO:3392

SEQUENCE LENGTH:78

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS03968

SEQUENCE DESCRIPTION:

GATCACAATC ATTTTGAATC CCTCTTCCTC ACTTTTTTTT CTAAGAAAAT AAACATTTTA 60
CTGTTTTTAT GGAATAAA 78

15

SEQ ID NO:3393

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03969

SEQUENCE DESCRIPTION:

GATCACAGCT GACATTTACA AAATATTTTT NTACCTTAGA ATTTCTGCAT TAAATAAAAT 60
ATTTTGTTTT AAA 73

25

SEQ ID NO:3394

SEQUENCE LENGTH:68

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03971

SEQUENCE DESCRIPTION:

GATCTTTTGC TAATGCAATT AGNATTATGT TTTGCATGTA TGACTTAATA AATCCTTGAA 60
TCATAAAA 68

35

SEQ ID NO:3395

SEQUENCE LENGTH:67

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03972

SEQUENCE DESCRIPTION:

GATCCTCTAA ATNTGGAATT TTGATGTAAT AACTGCTAAT AAAATNATAT TGAAACTGTT 60
TTATAAA 67

45

SEQ ID NO:3396

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS03973

55

SEQUENCE DESCRIPTION:

GATCAAAGCC CGGAAAGGCA AATGAAGCNT CATGTGTAGT GTAATAAAGN TGTCTGCTGT 60
TCAAA 65

5

SEQ ID NO:3397

SEQUENCE LENGTH:65

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS03974

SEQUENCE DESCRIPTION:

GATCGAAGCC TGTGTAAAT GCTACCAAAT GGCAAAAAGC AACAATAAAC AGTTTGATT 60
TTAAA 65

15

SEQ ID NO:3398

SEQUENCE LENGTH:64

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03975

SEQUENCE DESCRIPTION:

GATCCCAAT ATATCTACCA TTGTATGTTA AATAAATNAC CATTTTGTGA GAAAAAATTC 60
TAAA 64

25

SEQ ID NO:3399

SEQUENCE LENGTH:71

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03976

SEQUENCE DESCRIPTION:

GATCTGTAAA TNACTTTAAA AGCTATTTTA GTAATTTAAA TAAATTTACT TTCTTGGTTT 60
ATACTCTCAA A 71

35

SEQ ID NO:3400

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03977

SEQUENCE DESCRIPTION:

GATCTCTATA NTTTTTTTA AATTTTCTCC AGCCTGGGTG ACAGAGCGAN ACTCCGTCTC 60
AAA 63

45

SEQ ID NO:3401

SEQUENCE LENGTH:63

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS03978

55

SEQUENCE DESCRIPTION:

GATCTCCTGC TGCCTTTCCT GGAGTTTGTA AAATTNTNCC TGAATACAAG CCTATGCGTG 60
AAA 63

5

SEQ ID NO:3402

SEQUENCE LENGTH:62

SEQUENCE TYPE:nucleic acid

10

TOPOLOGY:linear

CLONE:HUMGS03979

SEQUENCE DESCRIPTION:

GATCCAAGCA TAGTAGAAAA GCTTCATGTG TTTTAAAAA TAAACAATAA CAAAAAATTA 60
AA 62

15

SEQ ID NO:3403

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

20

TOPOLOGY:linear

CLONE:HUMGS03980

SEQUENCE DESCRIPTION:

GATCATGTGT TCTGGAGAGT GTTCTTTATT CAATAAAGTT TTAATTTAGT ATAAACATAA 60
A 61

25

SEQ ID NO:3404

SEQUENCE LENGTH:61

SEQUENCE TYPE:nucleic acid

30

TOPOLOGY:linear

CLONE:HUMGS03981

SEQUENCE DESCRIPTION:

GATCTAATTT TTCAAACCTT CACTATTTTG AAAATATAAC CAAGGCCGGT TCGGCTGGAA 60
A 61

35

SEQ ID NO:3405

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

40

TOPOLOGY:linear

CLONE:HUMGS03982

SEQUENCE DESCRIPTION:

GATCATGAAA CTGATTGTAA AGCTTTTGA CAACTAATAA ATGTCTTGGT AATTGCTAAA 60

45

SEQ ID NO:3406

SEQUENCE LENGTH:59

SEQUENCE TYPE:nucleic acid

50

TOPOLOGY:linear

CLONE:HUMGS03984

SEQUENCE DESCRIPTION:

55

GATCAATGGA TTTGTTTACA ATGTGATATT TTCTATTAAA TCCAGTATTT TCAAATAAA 59

SEQ ID NO:3407

SEQUENCE LENGTH:58

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03985

SEQUENCE DESCRIPTION:

GATCTTGATAC TAACTTATGA TAGAATGTAT CAGAATAAAT ATTTTAAACA GTGTTAAA 58

SEQ ID NO:3408

SEQUENCE LENGTH:53

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03986

SEQUENCE DESCRIPTION:

GATCATNAAA GTATACAAAA TAAATAAAGT AGGAGATTTT TTTGCTGTTT AAA 53

SEQ ID NO:3409

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03987

SEQUENCE DESCRIPTION:

GATCTGTTTA GTGAGATTTA GCATGTGTGA ATAAAGTATA TGCAGGAGGA AATTGCTTTG 60

TNTTCCCAAT CGGTAGAAAT TCGGGACCAT AAAAATTGTG TTTTACCATG TGGCCTACAA 120

A 121

SEQ ID NO:3410

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03988

SEQUENCE DESCRIPTION:

GATCATTGTT AAAGGATTGC TGCAAATAAA TACACTTTAA TNTCAGTCAA A 51

SEQ ID NO:3411

SEQUENCE LENGTH:60

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03989

SEQUENCE DESCRIPTION:

GATCTTTAAA ACATTTTAA TGAACAAAGT TGAATAAAGG CACAATTTAA AACTGTCAAA 60

SEQ ID NO:3412

SEQUENCE LENGTH:53

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS03993

SEQUENCE DESCRIPTION:

GATCAAAACAG AAGCAGCCGT GGGCAAAATA CAATTTTCATT TAACAAATTG AAA

53

SEQ ID NO:3413

SEQUENCE LENGTH:521

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04020

SEQUENCE DESCRIPTION:

GATCTCATAG GACGGAGGGG GAAATGGTTT CCTCCAAGC TTGGGTTAGT GTGTTANCTG 60
 CTTATCAGCT ATTCAGACAT CTCCATGGT TCTCCATGAA ACTCTGTGGT TTCATCATT 120
 CTTCTTAGTT GACCTGCACA GCTTGGTTAG ACCTAGATTT AACCTTAAGG TAAGATGCTG 180
 GGGTATAGAA CGCTAAGAA TTTCCCCCAA GGACTCTTGC TTCCTTAAGC CCTTCTGGCT 240
 TCGTTTATGG TCTTCATTAA AAGTATAAGC CTAACCTTGT CGCTAGTCCT AAGGAGAAAC 300
 CTTTAACCAC AAAGTTTTTA TCATTGAAGA CAATATTGAA CAACCCCTA TTTNGTGGGG 360
 ATTGAGAAGG GGTGAATAGA GGCTTGAGAC TTTCTTTGT GTGGTAGGNC TTGGAGGAGA 420
 AATCCCTGG NCTTCACTA ACCCNTNTGG ACATACTNCC CACAACCCAG TTNGATGGGN 480
 TTTCCGTAA TAAAAGGGN TNGGNNNTN CCTTTTGAA A 521

SEQ ID NO:3414

SEQUENCE LENGTH:501

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04021

SEQUENCE DESCRIPTION:

GATCAGAAAT NACTGTGTCA TGGTGCTCAT TCACTGCAAA CTCCCAGTTG NAAGCTCCTT 60
 GGCTCCCCCG GAGGAGCAAG AATCTCATAG TTCAGAGACA CAGAGGGCCT TTTAGCCCTA 120
 ATNACCTTTT GGATGGGACT GCAACTCATG ACTATCCTGA TATTGGAAGA AAGGACTTTG 180
 TTAATCTTCT CCCCATAGC TCTGCTGCGT AGGTCTACAT CTTACTCAGA ATCACTACAC 240
 ATTCCTTTAG TCTTCTCCA AGCTCCAGAG CCATTGGTAC AAATGCTTTA TTGAAACTAA 300
 ATACATANTN NACACAATGA GATGAAGACA ATATAGANGT NCGCATAGTC ATCATAATCC 360
 CGTTCCTTGG CCGGTTGAGG CAGCTCAGTG GCTGAGCCCA GTCAAGCCAA CCCGGNAGTT 420
 TCACTCACGG CNTTCAAGGN TTTTGATGCT AATTCTTTTG GGTTCCTAC AGTTTATTAA 480
 ATAAGTNGTC TGNGTGGGAA A 501

SEQ ID NO:3415

SEQUENCE LENGTH:485

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04022

SEQUENCE DESCRIPTION:

5 GATCTCAGTG AACTAATACA CAGCTTGAGC GTTCCATGT GCTAATGTTG CACATTTACT 60
 AAAAACTTT GGAAATGGAA AATAATGTAT TAGTGCAACA GTTGATGTGC TTCTTTGGGC 120
 AAAGATATAG TTTTGTCCA CAATTTGTAC TAAAAGCGA AAGAACATTG AAAACATAGA 180
 CTTACTGGCT GTAGCAATGC TGGCCTGTTA ACTGATAACT AGAACTTAGG TTCACGTTTA 240
 TGTAAGTGT GTAAACCTA GTAGAGCTTG CATAGTCGGG CACTCAGTAA ATGGTTTGGT 300
 TCCTTTTGGC CCTTGGTAAG TTTATTTTAC CCATCCNCCC ACCTGCCCCAT TCTGACTTTN 360
 TATTAAATC ANCCATGTGG GACCCAGNGG TGTTAATGN GGATGTTATT NCCAGAAGGA 420
 10 GGATTTGAGA AAAATTTGGG GATTNTCATT GCAGGTTAAC NATTCACAAA ATNCTTTTTG 480
 GTAAN 485

15 SEQ ID NO:3416
 SEQUENCE LENGTH:471
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04023
 SEQUENCE DESCRIPTION:
 20 GATCTGTTTT TTCATCGAGG TNCGAGGTA TNCTTTNAAA GATAGTGANA NGCAGACACT 60
 GCTCCTTG TG CAGCTCTGGT ACCTCCTGCC CACTGCTGTC ACTTCAAGCC ACTGGCAATG 120
 CTTCTGTCTT CGTGTCTTGG AGGAAAATCA CCTGGGGGGA GGGGACTTCT TGTGGTAAGA 180
 GCAAGTGCAG GTATGAAATG CGAAGATTGC CCCAGCTAAA AGTGGACAAG TCCGCTTTGT 240
 25 GAGATGAATA CTTCTGAGA NNCNNNNCAA GTATCTCTCC ATTTTACCAT TATGAAAACT 300
 ATCATTAAAA AAAACAGTTT AGATGCCTTC TCCTTTTGAG GGAAAAAGGG TGCTTTTTAT 360
 TGTATAAAGC AGCGTCTTAT GTATTTTGAT ATACCATTGT TTGAACTTCC GTCTTTAGCT 420
 GATAGATTCT CAAATATCCT NGATTTTGGG ATGTTTCAGTA TGTTTGTGAG N 471

30 SEQ ID NO:3417
 SEQUENCE LENGTH:466
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 35 CLONE:HUMGS04024
 SEQUENCE DESCRIPTION:
 GATCAAAAT ATTTCAAGCT ATAAAAGCAG GAGGTTATCT GTGCAGGGGA CTGGCATCAT 60
 GTATTTAGGG GCAAGTAATA ATGGAATGCT ACTAAGATAC TCCATATTCT TACCCGAATC 120
 ACACAGACAG TTTCTGACAG GCGCAACTCC TCCATTTTCC TCCGCGAGGT GAGANCCCTG 180
 40 TGGAGATGAG TCAGTGCCAT GACTGAGANG GANCCGACCC CTAGTTGAGA GCACCTTGCA 240
 GTTCCCCGAG AACTTTCTGA TTCACAGTCT CATTTTGACA GCATGAANTG TCCTCTTGAA 300
 GCATAGCTTN NNNAATATCT TTTTCTTCT ACTCCTCCNT CTGACTCTAA GAATTCTCTC 360
 TTTCTGGANT CGCTTGAACC CAGGANGGCG GGAGGTTNCA GTAAGCCAAG GTCANTGCNA 420
 45 CTGCACTNTT AGCCTTNGGT NANAANTNGA GGTTTCATT TNTAAA 466

50 SEQ ID NO:3418
 SEQUENCE LENGTH:464
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04025
 55

SEQUENCE DESCRIPTION:

5 GATCGCCAGG CTGATTGAGA AGAACAAGAT GAGTGACGGG AAGAAGGAGG AGCTCCAGAA 60
 GAGCTTAAAC ATCCTGACTG CCTTCCAGAA GAAGGGGGCC GAGAAAGAGG AGCTGTAAAA 120
 AGGCTGTCTG TGATTTTCCA GGGTTTGGTG GGGGTAGGGA GGGGAGAGTT AACCTGCTGG 180
 CTGTGAGTCC CTTGTGGAAT ATAAGGGGGT AGTGGGAAAA GTGGTACTAA CCCACGATTG 240
 TGAGCCCTGA GTATGCCTGG ACATTGATGC TAACATGACC ATGCTTGGGA TGTCTCTAGC 300
 TGGTCTGGGG ATAGCTGGAG CACTTACTCA GGTGGCTGGT GAAATGACAC CTCAGAAGGA 360
 10 ATNAGTGCTA TAGAGAGGAG GAGAGGAGTG TACTGCCAG GTCTTTGACA GGTGTAATTC 420
 TCATTCANTT AAAGGTTTCA GTGTTTTTGG TTAAGGTGGA TAAA 464

SEQ ID NO:3419

SEQUENCE LENGTH:457

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04026

SEQUENCE DESCRIPTION:

20 GATCACCTTC CTGTCTGGAG GCCAGAGTGA GGAGGAGGCG TCCATCAACC TCAATGCCAT 60
 TAACAAGTGC CCCCTGCTGA AGCCCTGGGC CCTGACCTTC TCCTACGGCC GAGCCCTGCA 120
 GGCCTCTGCC CTGAAGGCCT GGGGCGGGAA GAAGGAGAAC CTGAAGGCTG CGCAGGAGGA 180
 GTATGTCAAAG CGAGCCCTGG CCAACAGCCT TGCCTGTNAA GGAAAGTACA CTCCGAGCGG 240
 25 TCAGGCTGGG GCTGTCTGCCA GCNAGTCCCT CTTCTGNTCT AACCACGCCT ATTAAGCGGA 300
 GGTGTTCCCA GGNTGCCCCC AACANTTCAG GCCCTGCCN NNTNCCAACT NTTTGAAAGA 360
 GGAGGNCGCC TTCTTNGGGG GCTTCCAGGT TNGGNTTNC CCGGNTTTT TTTTITTTCC 420
 TTGGGTGANA NATGGGTNGT TTNGGNGGCG GTNTTNN 457

SEQ ID NO:3420

SEQUENCE LENGTH:452

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04028

SEQUENCE DESCRIPTION:

40 GATCTGGAGG GGTCAACGGA AGACGGAACA TGTCCACTTC CAGGCCCGAG CTTCTNAGCC 60
 TGCCGTTTGC CACTCTCCAG CATCTGCCCC AGCCTGTCCA TCCTCATCTC TCTTCCTCCN 120
 NNACTCCGTG CTCCCATCAC TNGGAACCAT TTGCATTNT TTGTCTCAGC TATATTGTCT 180
 CACCTCTGAG TTTTGGCCA TGATGTTGGA TGCCATGGAA TGCCATATCN TCCCCATTAT 240
 CTCCCCCTTG TNTGGATAAT TCCTACTCAT CCTACAATAC TGATTTTAT CTGTGCAAAG 300
 AAGGTCTTCC CCAAGTGGCC TCTGGGTTNG ANAAGGGNG TTCTCTGGC TTNTTCCAGA 360
 CTTTTTTGTT TCCTNCAACC AAAAGGCTTT AGGCACCGTG GGGGAAGGAG GGGTNTTNT 420
 45 TNGTCCNAGG GAAAAAGNNT NGNGGCAAT GN 452

SEQ ID NO:3421

SEQUENCE LENGTH:450

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04029

SEQUENCE DESCRIPTION:

5 GATCAAACT AACCTTTCAG CGTATTCTCA GCTATGACAC AGTGGTGCAA ACAACTGGAG 60
 ACTCGTGGCA CATACCATAT GATGAAGACT TGGTAGAAAG ATGTTCTGT GAAGTACCAA 120
 CCAAATGGCT TTGCCTCCAC CAAAAGACAT AGAGATTCTT ACCTCTATGC TAAGTTTGTG 180
 TTTGGGTACC CTCTAGGTTG GCATCAGAGG CTCTGAGCT GGTGTTTGT TAGGGCATTG 240
 CCTCTGTCCT GAAGATAAAA GGATTNTATT AACAGCATTG ACATTGATT TTTAATGAAA 300
 TGAGATATAT CTTTTCATAA CCAGCTGCGT TTTTTCCTTA TAACATTGTG TTTTGGAGGG 360
 10 CTTATCAAGA GTTGGAGACC TTAGTGTAGA GCAAAACCTG CATTTCTCCT ACTGGGCCAG 420
 CTATTCCACT TAGGCTTGGG TGACTAANAN 450

SEQ ID NO:3422

SEQUENCE LENGTH:444

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04030

SEQUENCE DESCRIPTION:

20 GATCCCAAGT ATTAGGAGCT ATTTCTTAAA TAGTTTAAAT TTGCCTTTGA AAAAAGTTCC 60
 ATTAATTAAA AGTATTAAAT TAAGCAAAAT CATGGAACAC ATTGACTAAA AAATACCTTT 120
 TATTTTACT CAACTTGTTA AAGGGGAGTA TAAAGACTTT GGCAAAATTG ATTAAGTACA 180
 CAAAATAATG TTATCCAAAC TGAGTAATTT ATTGCTGGTC TGNGGCTTGC CTTGTTTACA 240
 25 CTTAAGTAGA ATTTACGTTG TTCCACAAA TGGCAGATAT CANTATTAA AGGNATTTAA 300
 TAGTGACCTA TTCAATAAGG CANTCATCTG GGGTAGCAA CTTTNTTTA AATCTNACAT 360
 AACCTCAGGC TTTATAANAA NGCCACCATA ATTGGAATAA TGGGGNTCCT CCCCTCTAAA 420
 NGCCTTAAGG GATTCAAAGG CTCN 444

SEQ ID NO:3423

SEQUENCE LENGTH:439

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04031

SEQUENCE DESCRIPTION:

35 GATCTTGTGA AAATGCTGTT AGTATCCAAC CTAAAAATAT ATTAGTATAT GGGTTTTTAT 60
 TAAAAGAATT ACTTTGAATT TNCTATTTAA TTCATATGTA AATAAAGGAA CATTTCATTT 120
 CACTTAAAAA AATTATATCA GTTATTAGGC TGGGTGCACT GGCTCATGCC TGTAATCCCA 180
 40 GCACTTTGGG AGGCCAAGGC GGGTGGATTA CCAGAGTTCG GGAGTTTGAG ACCAGCTTGA 240
 CCAACATGGA GAAACCCCGT CTCTACTAAA ATTACANAAT TNGCCAGGTG TGGTGGCGCA 300
 TGCCTGTAAT CCTGGGCTAC TCAGGAGGCT TGAGGCAGGN GAATNGGNTT GAAAACCCCN 360
 GGGGGNNAGA GGTGCGGTT GAGCTGAGNN TTGCGCCATT NNACTTCCNN CCTGGGCAAG 420
 45 GNGGGGNGNA ACCTNTNNN 439

SEQ ID NO:3424

SEQUENCE LENGTH:437

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04032

SEQUENCE DESCRIPTION:

GATCTAAGAA ATCATGTGCA TATATCTTTC AGATTCTAT TTTGGGAAAN TGAAGGTTTC 60
 TACAACATAT TGTTCAGTG TTCAAATAAA CTGAAGGACT CAACATTACA TTTGAACTAT 120
 ATCCTTCCTA GTGGGTTAGT GTGAAAAAGN GNTTGGCTGA TTCCTAAAAC TCTGCCAGCC 180
 CTGCAGTAAT CTCCAGGGNC NNGTTATTGT TCAGACATTC CNTGGTGATT CCTGGGAAGG 240
 AAGCTTGGCT GCTCAGTTTC TGAGTCTGGG GTGAGATAAT GTTCTGGGAA GGGACATCTG 300
 TTCTTTGGTG TAATCTCTCA TGGTGAAATC TGCTCTGTAC ATCAGACAAT TGCATTGCTA 360
 CCAAGTTTCA TACCAAATAT TTGAAAGGTT GGTATTGAAT CTAAANCCAA ATATTAGTTT 420
 TTNTTAAACT CATGGGN 437

SEQ ID NO:3425

SEQUENCE LENGTH:424

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04033

SEQUENCE DESCRIPTION:

GATCCAAACC TTACACCTGA GTCTGTTAAG AGCGCCCTGC TACAGGAGGC CACAGACTGC 60
 CTGATTCTNN NGGACCGCTG TTCTCAAGGA CGGGTAAAGG GTCTCCTGGC CAAAATTCCC 120
 CAAAGCTGTG AAGACAGAAA AGTGGTGAAC TATATCAGAA AAGTGCAGCA GGTTCCTGAA 180
 GCGCACCCT ACAATGGAAC TTAAGACTTG TATTACTTTC CCAAGAGGAA AGGATTTTTT 240
 TCCCATCCCN NNTTGTATGA ATGGAGTTAT TTANGAAAA ANGATATTTT TACACGAAAC 300
 TTTGTAAGTG AAAGCTGCTT TTTCTTCTCT TTTCTTCTCT TTTACCTCCA TAAGGAATAG 360
 GGAANGTAGG ACCAAGANAN AATTGAACTC CTTCCCATTT TCTAAATAAA GGTTTTGGGG 420
 GAAA 424

SEQ ID NO:3426

SEQUENCE LENGTH:422

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04034

SEQUENCE DESCRIPTION:

GATCTCNGAG CTACAATACT CACTANATAT ANTTTCCAA TCAAAATATN CTATTCTATA 60
 TTCTAAGGGT TAATATGTGA TTATAGTGTC CACTTGCCAC CATTTTTTTA AATCAATGGA 120
 CTTGAAAAGT ATTAATTTAG ATGGATGCGC AGATATACCC TCAGTTCAGT CATAGATTGG 180
 AGTTTGCATA TAATANNNCN CCGGTATGTN GACACTATTC TAAATAGTTC TATTATGACT 240
 GAAATTTAAT TAAATAAAN NGGTTGTAAA ATGNGATGTG TATGTGTATA TACNGTATGT 300
 GTACTTTTTA AAATAGGGTG TATGTCCCAA CCCTTTTTTA TACAGGTNTG AATTAAAAA 360
 TACCATGGTT ATATACATAT ACCTNGNNTT NGTCCTAAAA TAAAGGNTTT TNATGCACGC 420
 NN 422

SEQ ID NO:3427

SEQUENCE LENGTH:408

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04035

SEQUENCE DESCRIPTION:

5 GATCTTTCCA CCTCAGCCTC CTGAGTGGCT GGGACTACAG GTGCATGCCA CCAAGCCTGG 60
 CTAACTTTTT GTAGAGATAG GGTTTTNCCA TGCTGCCCAG GCTGGCTTAG AATTCCTGAA 120
 TTCAAGTGAT TTGTCTGCCT CAGGCTCCCA AAGTGCTGGG ATTACAGGCA TGAGCCACAC 180
 TGCACCCAGT CCATGCTACC CTTTTATAT GAAACACCTA TTAACACGGT ACAACAACAC 240
 TTCAAAACAT ATTATTGAA TTTNGGCNTC TGATTTTTTA GTCANCAATC CATTANGGCA 300
 AANACCTNGT TTTCCAACT CAGATGTTCT CCAACTTACA CTAATGTTG GTTTTTTGG 360
 10 ACTTNGGTGN GGGGAAAAAN TTAACCGGT TTTNNTTTN TTATCAA 408

SEQ ID NO:3428

SEQUENCE LENGTH:378

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS04036

SEQUENCE DESCRIPTION:

20 GATCTTAGCT TCTTAAATCA GACTTTGTGA CTAAAAGTT TGGGGGTTTT CTTTGAAAGT 60
 TTCCAGCCCT ATTCAGAAAG CAACTCTTGG CTGTGTGCAT TTTCAACTC CAAGCAGCCC 120
 AGGGGTAAAGT AAACAAAGTA TGGATGAAGG TCAGATTTN TTGTCAANNNT CTGAGAAACC 180
 TGGCAGCCTG CTGTTAACAA CACAGGCCAG TATTGGGTTT TATTGAATTT GGTATGTGAC 240
 CAAGGTCGGC CTAAAGGATG GCGCAGGTCC TGGGCAGGAA AGAATTTTTT CTTTATCACA 300
 25 TAACTGTAAT ATTTGGTTGC TCAGCATAAG TNATGGAAGC AACCACCTAA TTTCTAATAA 360
 ANTTGTGTTA ACCTCAA 378

SEQ ID NO:3429

SEQUENCE LENGTH:376

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04037

SEQUENCE DESCRIPTION:

35 GATCACAACA CCAGTACCAG CACGAAGAGC CTCCTCCCGA AAGAGTCTCG ACTGGACACC 60
 TTCTGGGACT AGCAGTGAAT CGGGACACAA ACCACCCACC CCATTGGGAG AAAAACCAG 120
 ACGCCAGGAA AAGAAGAAAC AACAAAGGCA GGAGAACAGC CACTTTCAGA CTTGAAAATG 180
 ACAAACCCCT CAGTTGAGCC TGAGCCCCCG GCGCGGGGGC TGCTACACTA CAGGACACCC 240
 AGCATCGGCT TTGACTGCAG ACTGTTCAAC CACACGAGCC CTGTGCTTTT GGTGTAAATA 300
 40 ATGTACAATT TGTGGATGTC ATTGAATCTA GAGGACTTTC CCCTTTTAT ATTTGTATTA 360
 ACTTAACTT ATTA 376

SEQ ID NO:3430

45 SEQUENCE LENGTH:368

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04039

SEQUENCE DESCRIPTION:

50 GATCAAGCTT GTGTACTTGA CCGTTTTTAT ATTACTTTTG TAAGTATTCT TGTCCACATT 60
 CTACTTCAGC TTTGGATGTG GTTACCGAGT ATCTGTAACC CTTGAATTTC TAGACAGTAT 120

55

EP 0 679 716 A1

5 TGCCACCTCT GGCCAAATAT GCACTTTCCC TAGAAAGCCA TATTCCAGCA GTGAAACTTG 180
 TGCTATAGTG TATACCACCT GTACATACNN NGTATAGGCC ATCTGTAAAT ATCCCAGNGA 240
 NCAATCACTA TTCTTAAGCA CTTTGAAAAAT ATNNCTATGT AANTNATTGT AAACTTTTTC 300
 AATGGTTGGG ACAATGGCAA TAGGACAAAA CGGGTTACTA AGGTGNAATT GNCCAAAAAA 360
 TTTTTTAN 368

SEQ ID NO:3431
 SEQUENCE LENGTH:374
 10 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04040
 SEQUENCE DESCRIPTION:
 15 GATCAATCTC AATTCCTTTT CATGCCCTCC TGCATTGCTG CTGCGTGGGT ATTTGTCTCC 60
 TTAGCCATCA GGTACAGTTT AACTACAAT GTAAGCTATA GGTGGAGCAT CAGCAGTGAG 120
 TGAGGCCATT CTTTCATCCTT AGGATGTGGC AATGAAATNN TGGTGCAAGT TCCTTTCTCT 180
 TTTGTGAATC TTTCCCCCA TTTCTGTTT ACATGTAACC CAACAAAATG CAATTTCTAG 240
 NGCCTTCTGT CCAATCAGTT CTTTCTCTG AGTGAGACGT ACTTGGCTAC AGATTTCTGC 300
 20 CTGTTTTTGC GACATTNNTC CCATTCACAC AGNTATTAN GGGGCTAATN AANNGGANAA 360
 ATAAGGCTTA CAAA 374

SEQ ID NO:3432
 25 SEQUENCE LENGTH:369
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04041
 SEQUENCE DESCRIPTION:
 30 GATCCTGGAG AACCTAAGAC TCCAAAAGCG TGGTACTGGA GGAGTGGACA CTGCTGCCAC 60
 AGGCGGTGTC TTTAATATTN CTAATTTGGA CCGACTAGGC AAATCANAGG TGGAGCTGGT 120
 GCAACTGGTC ATCGATGGAG TAACTATTT GATTGATTGT NAACGGCGTC TGGAGAGAGG 180
 CCAGGATATC CGCATCCCCA CACCTGTCAT CCACACCAGG CATTAATCC CCATCGNCCA 240
 35 GCTGATGACT CAAGATTCCA AGGAGTTCTG CTCATTCTAA TGGTGGGCCG TTCTACTTGN 300
 TCTGGACCTG NCCTNGNATC CCCNTNGNCC TNTNNTCCT TAGTTAAAGA CTTNGTTAGC 360
 TGATGNAAA 369

SEQ ID NO:3433
 40 SEQUENCE LENGTH:358
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04042
 SEQUENCE DESCRIPTION:
 45 GATCGTGGGG TTGTTGGCAG AGGGCAACCC TGGGCCCCAC ACCGTGTGGA CAGGCAGACA 60
 CCAGATTGTC CAGGAGCAGG AGCTGCTGGG ACTGCGCTGG CCCCGGACCT AGTGGGCCTT 120
 CTCCTGGCTG CTGAGATGTC GTCTGTGACT GGCCTGGCTG GAGGGGGAGT GTTGACAACC 180
 CAAAGCTGTT CTCCAGTCTG GGGAGGGAGA GGCAGGGTCC CCAATGTCCG AGCTGNATCT 240
 50 GGACGCTGCT CTTAAAGGAC CTCCTGGGGN AGGGGAAGCG GTAGGNTCTG GACTGGGNAA 300

55

GATGCTGTAT GACCTCCCTG AAGNACCCGT GACTTCCCCA TGNTTTACCC TTTTGTGN 358

SEQ ID NO:3434

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04044

SEQUENCE DESCRIPTION:

GATCTAGAAA GCAACTTGA AGTGTAAGA GTCACCTTCA TTTTCTGTAA CTCAATCAAG 60
 ACTGGTGGGT CCATGGCCCT GTGTTAGTTC ATGCATTAGC TTGAGTCCCA AATGAAAGTT 120
 TCATCTCCCC AAATGCAGTT CCTTAGATGC CCATCTGGAC GTGATGCCGC GCCTGCCATG 180
 TAAGAAGGTG CAATCCTAGA TAACACAGCT AGCCAGATAG AAGACACTTT TTTCTCCAAA 240
 ATGATGCCTT GGGGTGGGGA GTGGTAGGGG GAAGAGCTCC CACCCTAAGG GGCACACACT 300
 GAGTTGCTTA TGCCACTTCC TTGTTCAAAA TAAAGTAACT GCCTTAATCT TAAA 354

SEQ ID NO:3435

SEQUENCE LENGTH:354

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04045

SEQUENCE DESCRIPTION:

GATCATTAAAT GAGGAGCTGA TGGCCTCCCT GGACCAGCCA ACACAGACAN TGGTGATGCA 60
 CCGCACTGAG CCCACTGCCC AGCAGAACCT GGCTCTGCAG CTGGCCGAGA AGCTGGGCAG 120
 CCTGGTGGAG AACAACGAAC GGNTGTTTGA CCACAAGCAG GGCACCTACG GGGGCTACTT 180
 CCGAGACCAG AAGGACGGCT ACCGCAAAAA CGAGGGCTAC ATGCGCCGCG GTGGCTACCG 240
 NCAGCAGCAG TNCAGACGG CCTACTGAGC TCTCCACTCT GTTCCCGCC TGGGCCATCC 300
 AACCTTGAAG TCCTAAACCA CACCTCAGTC ACTAAAGGTC TGTTTAAAGT TAAA 354

SEQ ID NO:3436

SEQUENCE LENGTH:350

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04046

SEQUENCE DESCRIPTION:

GATCTAATTT ATTTATTTAT TGCCTGGCCG GTGACTCGGG GGAGGAGGCG ACCCTGTCAT 60
 CTGTCCCACC TGCTGCTGCC CTTGGAGCA GCCTGCACCT NCTCTCTCC CATCCGGCAA 120
 CAGTNTGAAA GTACGTGGAG GACGGGACCG GAAGACGAGA GAGGGCTGGA CATCTGCCC 180
 ACCGTNTCCC AGCCAGGGCA GNGAGGGGA CCATGGCCCG NANGTCAAGG GGCCCCGATG 240
 TGCACAGCTG CCACAGGGAG GGAGNTCTTG GGGAGATGGG CANTCAGGTG GCCCGTCCTT 300
 GGTNGAGTGC ACANANTTGC GCGNACANAT CGGGGTTTTT CCTGGNTTTN 350

SEQ ID NO:3437

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04047

SEQUENCE DESCRIPTION:

5 GATCTTGAAT CTCITTCTTT GTTCTGTTTG TTTAGTTAGT ATCATCTGGT AAAATAGTTA 60
 AAAACAACA AAAAATCTG TATCTGTTT TAGCATGTGC TGCATTGACT CTATTAATCA 120
 CATTCAAAT TCACCCTACA TTCCTCTCCT CTTCACTAGC CTCTCTGAAG GTGTCCTGGC 180
 CAGCCCTGGA GAAGCACTGG TGTCTGCAGC ACCCCTCAGT TCCTGTGCCT CAGCCCACAG 240
 GCCACANTGA TAATGGTCTG TTTAGCACTT CTGTATTTAT TGTAAAGATG NTTATAATGA 300
 10 AGATACACAC TATANCTACA AGAAATTATA AATGTTTTTC ACATCAAA 348

SEQ ID NO:3438

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS04048

SEQUENCE DESCRIPTION:

20 GATCTGAGCC ACCCTCCCCG CACAGCCCTG CACCCCGCCC CTAGGGTTGG CAGNCTCANT 60
 TGGCCCCCTGG CAGAGGAACA AGGACACAGA CATTCCCTCA GTGTGGGGGG CAGGGGACAC 120
 AGGGAGAGGA TGGTTGTCCC TGGGGAGGGC CCTCTGGCCC CAGGCAACCT TAGCCCTCA 180
 GAACAGGGAG TCCCAGGACC CAGGGAGAGT NTGGGGACAG GACAGCCTGT TTCTTNTAGC 240
 TTCTGGGGT GGGAGGCACA GGGGCAAAGC ANTACCCAG GGAANTGGG AGGTGGTGCT 300
 25 GGTGCTCTCT CCAGGNCCAC CATGCTGGGA GAGGCGGCCA GAGCTTN 347

SEQ ID NO:3439

SEQUENCE LENGTH:346

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS04049

SEQUENCE DESCRIPTION:

35 GATCTTCCCT GGNGGCCTTC GGCTGCNTGC NTGCCTGAGG TCCNGCTGC CAGTCCCGGG 60
 CCCTGGAGAG CAGATGCTGT CTTGTNATGT ACAGGAGGAC CTTTAAAAA AATCAAGTTT 120
 CTATTTTTTN CTGGTAGTCC GCATACCCAT ACCCTCTGTT TTTNAAAGG AAAGGCCAAT 180
 NAGTCCCAT TTGTAGCATG GCACCAGGGT CTTAGGCCTA GTCCTCTCAT TCCTCCCACC 240
 CTCCGAGATG GTCAGTGTGT CATGGGAAGC CCACCCCCAG CTCTGCCAGT GCTCTCTGGG 300
 40 CCTGGNTCCN AGTCAGTGGT GGCCACGATG CGGTACAGGG CATCCN 346

SEQ ID NO:3440

SEQUENCE LENGTH:343

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS04050

SEQUENCE DESCRIPTION:

50 GATCCATGTG ATTATTAATA TGACTGTAGC TGAGAGCTCT AATTNCTG TCTTGAACT 60
 GTATAAGANC TCATGTGATT AAGTTCACAG TTTATTGTTT GTNTGTTTAG TATTNAGAA 120
 ATATACCAGC ACTACTAATT AACTAATGTC TNTNATTAT NATATTATGA TAAAGTAAAA 180
 NTTTCACTTG CATTAAGTCT AAAGTGAGAA GGTAATTACT GGGNGNGAN TGAGCAGCTT 240

55

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TGACTTTGAC AGGCGGTTTG TGCAGGAAAG CACAGTGCCG TGTGTTTAC AGCTTTTCTA 300
GAGCAGCTGT GCGNCCAGGG TAGAGGAGTG TNGAAATTCA TTN 343

5

SEQ ID NO:3441
SEQUENCE LENGTH:340
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

10

CLONE:HUMGS04051

SEQUENCE DESCRIPTION:

15

GATCTGCTCA GAAAGGAAGA GGCAGGCGCC AGGGGGAACC CCCTTCGTGT TTTGTAACCC 60
TCCCTTTNAG GTGAAGCCCT TTTTCTTGCT AAAACCGGCA ATTCTCCGT TAGAAATNTT 120
ACTTGGTGTT TTTTGGTTTT GTGAAACGGC CGTCCCAAAG CTGGCTGGAT TCCTAGAAGA 180
GTCTGTGTTG AAGGCATCTT TCAAGCCCTC GCTCTGGTTC TNAGGGCAGC ATTTCCAGG 240
CGGGTTTGT TCGCATTTCT TGGAGCCTCT CCGNGNAGCA ACCAGACGGG AGATTTTAAT 300
TTTAAGCTGT TCATGCTGGG NCTGACAGCC TGCAGGGTTN 340

20

SEQ ID NO:3442
SEQUENCE LENGTH:339
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

25

CLONE:HUMGS04052

SEQUENCE DESCRIPTION:

30

GATCCTTGGG CTGGCCTAGA ACCAGTATCT GTAGTGGATA TAAGCCAACA ATACAGCAAT 60
ACTCAAACAT TCACAGGCAA AAAAGGAAGA TACTTTTNTT AACATTTCTG AAATTCAACT 120
GGAAGCTTCA TGTGTCAGGA ACATCTTGGA CAAAACCTTA NGTTGTGTG ATATAAATTT 180
ACCCAAAGAT GATGNCTTTG ATTGGNTAAT TAGTAAGGTC TTTTGTAT TTNCATCGT 240
ATCAGGTATT GTTGATATTA GAGAAAAANG TAGGATAACT TGCAACATTT AGCTCTGGAA 300
GTACCTACCA CATTTNGAG ATTTACCGTT TCCATATTN 339

35

SEQ ID NO:3443
SEQUENCE LENGTH:339
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

40

CLONE:HUMGS04053

SEQUENCE DESCRIPTION:

45

GATCTGCCGT TNATGTTGCT TTCTCCTTG TCCTCTTGGA CTGAGGGCA TTGTGAAAAG 60
CTTGCTGTG ATTTAAAAAT GCCAGCAAT TTAATCTAGC AGTGTGAAG CTGGGAATTT 120
TTTGGCGCAA TCCATGTAGC AGTGACCCAG GCTTGGGAGC CAGAAACAAG TGTGACCTGG 180
GATTTNATTT AACACAACGT TTGCCAAAGA GTTGGCTTTG TTTATTTGGT TTTGGCGGGG 240
AGAGGAGTGG TATTTNATGC TTTCTGTGGA CANTGTAACC CTAAACACAN CANGTATTTT 300
AANTGCCACC TACATAANTA AACCATANGC NTATTGAAA 339

50

SEQ ID NO:3444
SEQUENCE LENGTH:339
SEQUENCE TYPE:nucleic acid

55

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TOPOLOGY:linear

CLONE:HUMGS04054

SEQUENCE DESCRIPTION:

5 GATCTACATA AAAACTGCTA CATGNCAAAA ACCACACCTA AAGAAATTTT AAGAATTTGG 60
CACAGTTACT CACTTTGTGT AATCTGAAAT CTAGCTGCTG AATACGCTGA AGTAAATCCT 120
TGITCACTGA AGTCTTTCAA TTGAGCTGGT TGAATACTTT GAAAAATGCT CAGTTCTAAC 180
TAATGAAATG GATTTCCTCAG TAGGGGTTTC TGCATATCAC CTGTATAGTA GTTATATGCA 240
10 TATGTTTCTG TGCATGTTCT CTACACAAAT GTAAGGTGNC ACTGTATTTA ACTGTTGCAC 300
TTGNCAACCT TTCAATAAAG CATATAAATG TTGGTTAAA 339

SEQ ID NO:3445

SEQUENCE LENGTH:334

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04055

SEQUENCE DESCRIPTION:

20 GATCAGCCTC TTCCTCTATA AACAAATGACC AATTAGACGT TTCCGTAATT CCATGTATTA 60
TGATAGTAC ACTCTATAAA TGTAATGTGA ATGCTTGTCT AAAAAGTGCA ATTTATTGTA 120
CATTGTCCCA ACAAAATGTTT ACTTTTATAA TCGTTATGAA CTTGAATTGG ATTAGTATCT 180
TGTTTTTATG TGTGAATGAA GCCTTGTGAA ATAAACAAAT GCAACTGAGA AGGTAACAAG 240
25 GTGACTGTTT TTGTGAGCCA GTGATGTTTT CAATGCTTTG TGTGCCCCCT TTGGCCCCAT 300
TAAGCAGTAA TAAACATTTG TTCTGAAATC CAAA 334

SEQ ID NO:3446

SEQUENCE LENGTH:334

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04056

SEQUENCE DESCRIPTION:

35 GATCCAAGAA GCGGGTCCCT GAGACGGGGG GTGGCTGCCC TCCCAGACC ACCCGGGCAG 60
CCTGAGCAGN TCCAAAGCAC TGGCTTGGGG TCCGAGACCT TCAATGTAAA GCAGGCGGAA 120
TGGGGGGACA GGACAATTTT TCCCCCTCCA GGGGCTCCAG GACTCTCCCT GGGGGGCCCA 180
CCTCTTGGCC CCTAACCTCT TCCCCCTTT TCTGCCCCCG TGGGGAGGAG CCCCTTGTA 240
CTGCTCCGTG CCCAACACAT GCCCTCTCTG TACATCTTTT GGTAAATNAT GAGAAATAAA 300
40 GGAAGTGGAC GCAAAGTGGA TCGGCAGCA GAAA 334

SEQ ID NO:3447

SEQUENCE LENGTH:332

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04057

SEQUENCE DESCRIPTION:

50 GATCCAATCT CAGTGTCTAA CTCATCATCC CAGATTATTC TGAAGTGGAA ACCACCCTCC 60
GACCCCAATG GCAACATCAC CCACTACCTG GTTTTCTGGG AGAGGCAGGC GGAAGACAGT 120
GAGCTGTTCT AGCTGGATTA TTGCCTCAAA GGGCGAGTCC AGTCATCAGC TCCGCTGTAA 180

55

EP 0 679 716 A1

GCTGTTGGCC CTGCATTCAA GTAACCAGAA CCACCCGTGA GAGCTGCCAC CAGGTANTGT 240
CACTCGAAGC TTCCTTTTTT TTTTTTTTNA ATTCCGGAAA GTTTAANTCT GTANTCCCAG 300
GGGNCCATTT AAANANGGTT TTTTTTGTGA AN 332

SEQ ID NO:3448
SEQUENCE LENGTH:332
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04058

SEQUENCE DESCRIPTION:
GATCAAAAAA AAGCTNGAAG CCTACATTTC CCAGAGCCCC TTTCAGCTTG AATTCCAAAT 60
GTGACTTAGC TTCCTCTATG CAGATGTACC TACTTGAAC TGGGAAGGCC AAATNAGATA 120
GAGGNAATNT TTCTGCCAAC AAACAGCCAC AGAGCATTTT ATTTTCTAG AAGAGCAATA 180
ACAGAGACCC CAGGGTGTGG TGTGGCAGGA CGAGGAGCAT CCATTTTGCT GGNGGGGATT 240
GTGGCTAAAA TAATGNGGCT CTGGAGCCAG CAATNGGCAG CATCTTCATG ACTTTCCAGN 300
TTCCAGGCTG TAAGCAGAGA TAGCATCTCT TN 332

SEQ ID NO:3449
SEQUENCE LENGTH:326
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04059

SEQUENCE DESCRIPTION:
GATCCACTAT ATGCCTCAGC ACATGGAACC TTAATGACCA AAGTGAAGAG CAGATTATTC 60
ATACGGTGTA ATAAGCATCT GGAATGGACC CATCCGTGTA CTTCAATCAA ATGTGTAAAT 120
GTCATATTCA TTCAGATTTA TAAAGCTAGT AGTGTATAGT CAGAAACAGA ATCAAAGTTA 180
GATATACATT TTTAAATATT TACTGCATAT GAGGCTTTCT GTTAATTTT TAATGTGAAT 240
AATTTATATA TTGCACATTC TAGGGAATAA TATTGATTGT ATGNCTACTG TGCTGCATTA 300
AGAAAATAAA ATTCCTATAT NCCAAA 326

SEQ ID NO:3450
SEQUENCE LENGTH:329
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04060

SEQUENCE DESCRIPTION:
GATCAGAAAA ACTGAAGATG GAAGTTTTGG CCGGTGCTCA TTAGACATGA GTCCTCACTC 60
TGTNTCCTGA GCCCGTTTCA TTCTTCCAAC CTCCCTGCCC CCACACACTT ATCCAGACA 120
CAACACCATG TGGTCTGGAG GTCCCAGCCC CCACCCTAAA AAGGTTATCC CNGAGAACTC 180
CACCAGACTT GGGAGCCCAA GTGCAGTGCC TGGNGCTGCT CCCATCTGCC GGCCCCNTTC 240
TTTCCTNGCA ATTGGTTTGN ACTCACTGGG CTGTGCTCTN CCCTGTTTAC CCGATGNNNG 300
GGAAATAAAG GCCCTTTTGC CTCCTGAAA 329

SEQ ID NO:3451
SEQUENCE LENGTH:325

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04061

SEQUENCE DESCRIPTION:

GATCTGGCGC TTCTACTTTG AGGGCTTCTT TGACCTCATT GCTGTGGTAN GCCGGCGTAG 60
TCCAGACCAT CCTATACTGT GACTTCTTCT ACTTGACAT TACAAAAGTA CTCAAGGGAA 120
AGAAGCTCAG TTTGCCAGCA TAAGTGCCAA AGGCCATCAC CAGCATCTGT CCTTCAGGGT 180
GCTCGGACAG ANTTNTTACC ACAGCAANGG CATAAGGTGC TTTATACGGA AANTCAGNAA 240
CTTAACCTTT TTGTTGCAGN TAGTCATCAG TGGCTCTGTA AAAACGGAGG GGGAAAGNGN 300
CNGGAGGTTT CTGTTTAATG CATCN 325

SEQ ID NO:3452

SEQUENCE LENGTH:324

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04062

SEQUENCE DESCRIPTION:

GATCTGATTT TATGTTGTA ACTTTCTGTA AAGAAAGACA CAAGGACTTT TCAAAGACAG 60
TTTATACTT TCCAAGGCAG GAAGCTTTGC ATTTGCAATC TTAGTGTGT GTCCCTTTCT 120
GATTTTCAA TACATCACAC CTGCCCTTCT GTTTTGGGAG CAAAGATGTA ATTCAATTC 180
CCCTTGCTAC CGTCCTTATT TAAATNATTT CCATTCTAAG AGATTTTNGT NATTTNNNTA 240
AATGTAATCT GAGCACTTTN TNGTATTCTA AAAGATAGAT GATATCAGAT AAATATGTTG 300
TACATTTTGA TTAAATTAT TTTN 324

SEQ ID NO:3453

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04063

SEQUENCE DESCRIPTION:

GATCTGGAAG ACAGACGTAC AGCTTGGAGG GCAGGGGGAC TCTAAGGCAA GGAGATTTAC 60
AGTTGGGAAG GAGGCAGTGG CAGAGGGGTG AGGGACAGGG GCCCTTAAGT CCAGCGAGGA 120
AAGCTCNNTG TGGGCCCCTG CTACGCTCCG TTTGGGGTGA CCTGGAACGC CTCTTCTCCC 180
AGCTCCCTCC AGCCATCAGC AGCCTCTTGT CAAGCTTCTG CCTCGCCCCA GTCTATCCCC 240
AACCCCAAAT CAAGACCACC TTTCTTCACG GTCACATTTT ATTCTTTGTT CCTTTTCTT 300
TTTGTAAGAA ACATTCACAA AAACCAAGTGC AAAACCAA 339

SEQ ID NO:3454

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04064

SEQUENCE DESCRIPTION:

GATCTCAATG CTGTCTGGGG ACCCTGAAGA GTTTTNTNAC CTGTTCAATC TCATCTAACC 60
TTCCAATGTN TGATGTTCTT GCCAAATTCC TGCCTGATTC TGGGTCCGTC CTGACCTCCA 120

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5 AAGGTCAGNT TGGTGCTTGA GGTCTCCNTG CTCTTGGTGG CAGTGGTAGC AGCAACAGCA 180
GCAGCAGCAG CAGCAGCAGC AGCAGAGACC TNTCCACTTT CCCTTAGCCC TNTGNTGGGT 240
AGAGGGAAC TAAAGGACTT CCTCCAGNNG CNTTAATNT GGGAATGGGT AAGAAGGTTG 300
NGCTCCNCTG TTNGTTN 317

10 SEQ ID NO:3455
SEQUENCE LENGTH:315
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04065
SEQUENCE DESCRIPTION:
15 GATCCTCAAA AAACCCAAAA ACACCATTCT CTAATAGTCA TGACAAATGG CTTTCAGTATG 60
GCTTGTITTT NATTTNCCAG ATGGCTTTT CTCTTATTT TNGAAGCCCC AGTCTTTGAT 120
TTTACAGGTA ACTTTCAAAA CATCATGATG CTGCCAAATG TACTTTTGTA AACTTAAACA 180
TTATGATTCC TGTATTATT CAGTGAGAGC TACAGTGTGA TATTNCAGAG TCTATTAAAT 240
AAAAATGTGA GTTTGAATTA CACCATCTGT GCCAATTACA AAGCAATTAA AGGATTTATN 300
20 TNTNATGAAA AAAAN 315

25 SEQ ID NO:3456
SEQUENCE LENGTH:312
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04066
SEQUENCE DESCRIPTION:
30 GATCTGAGGC TGTGTCTCTG CCTTGTITTT AGAGGACTTC AGCGTCCAAG ACTGGGGCCC 60
ACCNTTNTCA CCAGCACTAA ATGCACTAAC AAGGACTCCA GACCTGCAGC CCCAGACCCG 120
CCGTAGTATA AGCCTAACA GCAACANGTA GCACCTTAGT CTTTGTTCCTA GGAGAGCTGA 180
GCAAGCTGGT GAAACCACTC TCCTTCCTTT AAACANC GTT TCAACCANCC TTTNCNTGGA 240
GCCAACNTGT AAAAAGTGGG TTGATTGCTG ACAGNATGGT CTTCTTCCC TGGATTTNAG 300
35 ACATACCACT TN 312

40 SEQ ID NO:3457
SEQUENCE LENGTH:309
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04067
SEQUENCE DESCRIPTION:
45 GATCTTTCCG GGGCCTACAG GCGTGTAAGA CAGCTTGGTC TGGTCTGTGC AGAAGTGGGG 60
AGTGATGGGC AGGTTCCGCA GCCTAACATT GTTCAGGCGC ATGGCCCTG CCGTGTGTAC 120
ACGAACTCGG CTTCTTTTGT CCTAGGTACG CCAAGGGCAG GTTCTGGAG ACTCCCTTGT 180
GCCCCGGGATG GCAAGGGCAC CGGGCTGGCG TTTCCACATC TGTCTTCATT AGCAGANNAG 240
TGATGATGGA TTTTATTTC CTCACACTCC AGTTTGAAT AAAATGCCAA ATTCTGTCAG 300
50 CTATCCAAA 309

55 SEQ ID NO:3458

SEQUENCE LENGTH:309

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04068

SEQUENCE DESCRIPTION:

GATCAGCACC ATTTGTGGTA TGTTCGGTGA TGAGCGTTTA GTGAGCCTNN TGGCTGCAGA 60
GCACTATGAA ATCATGGTAC GTAGTCCCGG GCACCTGTCG TTATTCCTAT ATCCTCCTGC 120
AACTGTGGTT TGAAACTGCG CATTCTCTAG TAGTATATAT CGTGCCTGTC TTCAAAAACA 180
TTTCCCTTNN GTATACTCAT NCCCCCAGG CATTGGGGTA GTGTCAGTCG GACTGCACAG 240
GGAACACGGT TTCCAGTGGC TTTGGCCCCT ACTCGGGAAA CGTCTGCCTG TTCTCGATNG 300
TGATGGGGN 309

SEQ ID NO:3459

SEQUENCE LENGTH:308

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04069

SEQUENCE DESCRIPTION:

GATCTAGCTG GTCACGACGA TGTTTTCACC AAGGTCACAG GAGCATTGCG TCGCTGATGG 60
GGTTGAAGTT TGGTTTGGTT CTTGTTTCAG CCCAATATGT AGAGAACATT TGAAACAGTC 120
TGCACCTTTN ATACGGTATT GCATTTCCAA AGCCACCAAT CCATTTTNTG GATTTAATGT 180
GTCTGTGGCT TAATAATCAT AGTAACAACA ATAATACCTT TTTNTCCATT TTGCTTGCAG 240
GAAACATACC TTAAGTTTTT TTTGTTTTGT TTTGTTTTT TTGTTTTTNG TTTTCCTTTA 300
TGANGAAA 308

SEQ ID NO:3460

SEQUENCE LENGTH:351

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04070

SEQUENCE DESCRIPTION:

GATCAAGCAG AGAAANTAAT TAATTCATG GGAATAAATG AACTAGTGAG GATAATATTT 60
NCATAATTNT TNATTTGAAA TTTTGCTGAT TCTTTAAATG TCTTGTTC CAGATTTTCAG 120
GAAACTTTTT TCCTTTTAAG CTATCCACAG CTTACAGCAA TTTGATAAAA TATACTTTTG 180
TGNACAAAAA TTGAGACATT TACATTCCT CCCTATGTGG TCGCTCCAGN NCTTGGGAAA 240
CTATTCATGG AGTATTTNTA TTGTATGGTA ATATAGTTAT TGCACAAGTT CANTAAAANT 300
CTGTCTNTG TATAGCANGG NNNGGGTTGG GGGGGCGGGN GGNGGGGGG N 351

SEQ ID NO:3461

SEQUENCE LENGTH:305

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04071

SEQUENCE DESCRIPTION:

GATCAGATAG TTTCTGAGG CTAAAATGCC CCAACATGTA AAAGACTGCN ACAAGGGTTA 60

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5
ATGAGCCAGG AACTGCCGAT GGTAACCTAC ATCTCTATAA TTACCATAGG ATATATATGA 120
GTACCATAGG ATTCTTTTGC ATAAGTGTAG AAAGTACAGA CAACACCCCTC CCGTGTTTGC 180
TATTAGAGTT TTTANTGTTG ATTGGAAAAT GGGAGATTCA CTGTGTGCCA TTCTTGGTAT 240
ACGTTGANGA AATTACATCA CTAGTACACA CNGNGGNNNT TCCACATTCA CACGCCCCAG 300
CTCTN 305

10
SEQ ID NO:3462
SEQUENCE LENGTH:303
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04072
SEQUENCE DESCRIPTION:
15
GATCAAGCTA CAGATATGGG ATACAGCAGG CCAGGAGCGA TTTACACCA TCACAACCTC 60
CTACTACAGA GCGCAATGG GTATCATGCT AGTATATGAC ATCACCAATG GTAAAAGTTT 120
TGAAAACATC AGCAATGGC TTAGAAACAT AGATGAGCAT GCCAATGAAG ATGTGGAAAG 180
AATGTTACTA GGAAACAAGT GTGATATGGA CGACAANNGT GTTGTACCTA AAGGAAAAGG 240
20
TGANCAGATT GCNNGGGAGC ATGGTATTAG GTTTTTTGAG ACTAGTGCAA ANGCGGTAT 300
AAN 303

25
SEQ ID NO:3463
SEQUENCE LENGTH:303
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04073
SEQUENCE DESCRIPTION:
30
GATCCGGTCA TACATCCACA TCAGGCCTGG CCAGCTGGAT GTTCTTAAAN AGTTCCACAA 60
GCAGATTACT GCACGGGCAA CAAAGGATGG GACTTTTGTC ATTTCAAAGA CATGATGTAT 120
GGGGATTAGA AAGAACTCAA GACACTCCTG CTTGATACAG AACAAAAAGA GCTTAACAGG 180
ACCAACAGGG CTTAAGCCCA GACTTGACGT AACAGAAATG TGCCAATAGG TAATAGGTAA 240
35
TTTTNCTTTC TCTGACTTGT TTTGTTTTCT TGAATAACA CTGTTGTGTG GCTAGAAAGG 300
AAA 303

40
SEQ ID NO:3464
SEQUENCE LENGTH:348
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04074
SEQUENCE DESCRIPTION:
45
GATCTACTTT CACATTCTCA AGTTTTNTC ATCTGCATTA GAGGTGCCCA GTAGGTTCCC 60
AGGTTCCAGC GTGCCCTCC CTCAGACACA CGGACACAAT CAGCCGAGAA GTTCCTGGTC 120
TGAATCACGA GAATGTGGAG GGGTGGGGG TGTCAGTGA AAGGCATAAG GCTGAGCTGA 180
GACCAGTTGC TGGTGAACCT GGGCCAATCT GGGGAGGGGA ACATCCTTGC CAGGGAGTTT 240
CTGAGGGTCT GCTTTGTTTA CCTTTCGTGC GGTGGATTCT TTTAACTCC GTCTACCTGG 300
50
CGTTTTGTTA GAAATGTCAG ATAGGAAAAT AAAAACCATT TGAGTAAA 348

55

SEQ ID NO:3465

SEQUENCE LENGTH:299

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04075

SEQUENCE DESCRIPTION:

GATCTGACCT GGTGAGATTA TTTCTNATGA CCTCATCAAA AAATAAACAN TTCCCAATGT 60
 TCCAGGTGAG GGCTTTGAAA GGCCTTCCAA ACAGCTCCGT CGCCCCTAGC AACTCCACCA 120
 TTGGGCACTG CCATGCAGAG ACGTGGCTTG GCCCAGAATG GCCTGTGCCA TAGCAACTGG 180
 AGGCGATGGG GCAATGACAG ATACANCAGA ACANTGCTTT TGAGGCANGC TTCTTCCCTN 240
 GNGGGTNGGT TGTNATGGCC NTGGCTTTTT NAGTTGGGNG NCATTANAT TAAGGTTN 299

SEQ ID NO:3466

SEQUENCE LENGTH:415

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04076

SEQUENCE DESCRIPTION:

GATCTACGTN ATCTCAGGGC AGTTCCTACA GATGAAGCAA GAGCTTTTNC AGAAAAGAAT 60
 GGTTTGTNAT TCATTGAAAC TTCGGCCCTA GACTCTACAA ATGTAGAAGC TGCTTTTNAG 120
 ACAATTTTAA CAGAGATTTA CCGCATTGTT TCTCAGAAGC AAATGTCAGA CAGACGCGAA 180
 AATGACATGT CTCCAAGCAA CAATGTGGTT CCTATTTCATG TTCCACCAAC CACTGAAAAC 240
 ANGCCAAAGG TGCAGTGCTG TCAGAACATC TAAGGCATTT NTNTTCTCCC CTAGAAGGCT 300
 GTGTATAGTC CATTTCCCAG GTNTGNGGAT TTAAATATAT TNGTAATNCT NGGTGTCACT 360
 TTTGGTGTTT TATNACTTCA TACTTATGGN TTTTTCATG NCCTAAGNCT TTTN 415

SEQ ID NO:3467

SEQUENCE LENGTH:295

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04077

SEQUENCE DESCRIPTION:

GATCCACCTT CTTCTTAGG TCCCCTCCTC CATCAGCAAA GGAGCACTTC TCTAATCATG 60
 CCCTCCCGAA GACTGGCTGG GAGAAGGTTT AAAAAACAAA AATCCAGGAG TAAGAGCCTT 120
 AGGTCAGTTT GAAATTGGAG ACAAACTGTC TGGCAAAGGG TGCGAGAGGG AGCTTGTGCT 180
 CAGGAGTCCA GCCGTCCAGC CTCGGGGTGT AGGTTTCTGA GGTGTGCCAT TGGGGCCTCA 240
 GNCTTCTCTG GTGACAGAGG CTCAGCTGTG GCCACCAACA CACAACCACA CACAN 295

SEQ ID NO:3468

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04078

SEQUENCE DESCRIPTION:

GATCAAAGCA CTGGGCTTGT CCAGGCNCAT AATAAATGCT CCATTGAANG TACTATTCTN 60

GTTTTCCACT GCTGTGAAAA CCTCCTTGCT ACTATAGCGT CTTATGTATG GTTTAAAGGA 120
 AATTTATCAG GTGAGAGAGA TGAGCAACGT TGTCTTTNCT CTCAAAGCTG TAATGTGGGT 180
 TTNGTTTTAC TGTTATTG TTTGTNGTTG TATCCTTTTC TCCTNGTNAN TTGCCCTTCA 240
 GAATGCACTT GGGAAAGGCT GGTTCCCTAG NNNCCTGGTT TGTGCTNTT NN 292

SEQ ID NO:3469
 SEQUENCE LENGTH:291
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04079
 SEQUENCE DESCRIPTION:

GATCTCTTAA GAGATGATGG ACTTATGTAT GTTACAAGAC TTCGAAATGT TGGAGTCCAA 60
 GTNGTTCATG AACATATTGA GGATGGAATT CATGGAGCTT TATCATTCT GACTTCACCA 120
 TTTTATTTAC GTCTAGGTCT TAGGATAAGA GATATGTATG TAAGTNGGCT GGATAAGANT 180
 TTATAAATAT GTGATGTGTA TGTATAGCCC TTACATAGTG GATTGTAATT NGTGATATTT 240
 TGTGGTTTTG GAGCAAAGAN CAATGTCATT TGAGTTATCT AAATCTACAT N 291

SEQ ID NO:3470
 SEQUENCE LENGTH:290
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04080
 SEQUENCE DESCRIPTION:

GATCTTTTGA TTCCTCTTGG GCTGAAGCAG ACCAAGTTCC CCCCAGGCAC CCCAGTTGTG 60
 GGGGAGCCTG TATTTTTTTT AACAAATCC CCATTCCCCA CCTGGTCCTC CCNCTTCCCA 120
 TGCTGCCAAC TTCTAACCGC AATAGTGA CTGTGCTTGT NTGTTTAGTT CTGTGTATAA 180
 ATGGAATGTT GTGGAGATGA CCCCTCCCTG TGCCGGCTGG TTCCTCTCCC TTTTCCCTG 240
 GTCACGGCTA CTCATGGAAG CAGGACCAGT AAAGGGACCT TCGATTAATA 290

SEQ ID NO:3471
 SEQUENCE LENGTH:287
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04081
 SEQUENCE DESCRIPTION:

GATCCAAAGT CCTGTGGTTA ACGCCTTCAT TTATAGATGA GGCAGCTGAG GCCTGGGGAT 60
 GTGAACAACC TGCTCACAGT CCTCATTTAC TGGATTTGAC TTCAGCCAGG TGAAGTGGAA 120
 TGCCTTGGGG CGTGAAGGG CATTAGGAGT GTTTCATTG ATATGTGAAT GCTCATAAAA 180
 AAATGTCAAG GAATGAAGAA CAGCANCTCT CAGTGGTGCC TGCATTTATA ATTATTTATG 240
 TGAAAGTCAA ATTCATGTAC AGTAAATTTG TTATAAGAAT ATTCAAA 287

SEQ ID NO:3472
 SEQUENCE LENGTH:287
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS04082

SEQUENCE DESCRIPTION:

5 GATCCAAAGT GCAAGGNTTT GATTATAAAC ATAATTCCT AGACTGAAAG TTTTGGAAA 60
 AGATGCAGGG TCTGAGTCAG GCCTTCTGGT TATATTGTGC AGTTTCAAAA GAACTATTTA 120
 ANACTCTTGA AAACCTCATGT AAATAAAAAAT CATAGGGTGA AAATTGTATT TGTAAAAATA 180
 CCTTAATAAT TTAATATGAC CTGATTTTCTT GGAAAATTTT ATTATTCAA AGGTGGAGGC 240
 ATTGTAAAAA GGAATAGTG ATGTAAATAA ACATGTTCTC TTTCAAA 287

SEQ ID NO:3473

SEQUENCE LENGTH:278

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15 CLONE:HUMGS04083

SEQUENCE DESCRIPTION:

20 GATCTGTTTG TCACTGACAG ACTGTAGTAG TGTCTGTGTG CTGACTGATA GATAGACTAT 60
 AGTAAAATTT GGGTGTGGCC TGAATAACGG TCTAGGGTCT GTAAAGCTGAC AGTCTGCCTG 120
 CTTTCTGATT GTATCCATTG AAGTGTATGT ACATTATGGT AATNCTCTGT CTATTAAATG 180
 TGTCTAACAA AGGAAGGAAT TAAGCACTCC ACATGTTTTC TTTATAGGGG AGTCTGTAC 240
 ACTATGATTT TAAATAGATA TTTCTTATAT AANGGAAA 278

25 SEQ ID NO:3474

SEQUENCE LENGTH:278

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04084

30 SEQUENCE DESCRIPTION:

35 GATCCCAACA CTGAAGGGGT AGAAGGCCAG GGGGGCATGG AGAGTGCAGC TCCATTATAG 60
 TGAAGAGCCA AACATATGTN AACTGTTTGC TGTGTGGAGG TGTTAGTTCT GCTGCCTACC 120
 ATCTTCATCT CTAGCACCTC CCCTGCCAAG AGTCAACCAC TAAGCAATCC CACCCAAGCC 180
 TGGATGCTTC TAGAGGGGCC CACTCCCAGC TGGGAGAGTN TAGGGGATAT GCTCACACCA 240
 CATTAGCAGC AACCAATAAA AATGCTGGAA ACAAGAAA 278

40 SEQ ID NO:3475

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04086

SEQUENCE DESCRIPTION:

45 GATCTTAACT GTGTCATTTG AAACCCTGTG CGTTTGAAGT GGTGGAGACA GGACCTTTAT 60
 CATATTCTGA GCTTTAAATA TATAAACNGG TAAATCATTC CATTTAATAA GACATAGCCC 120
 AAGTCCCAGA ACGCGTTTTC AGAGTAACCA GAAACAGAGG TTATTTGTTT TGCTTTCTTT 180
 TATCACTGCT ATGGATGGG ATATCCCAAA CAAGTGGATG TGCGCCCCAA TTCTATTTTC 240
 CACTATTCAA TGATTAAAT AATTACAAAA ACGCAAA 277

50 SEQ ID NO:3476

55

SEQUENCE LENGTH:273

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04087

SEQUENCE DESCRIPTION:

GATCTTTCCA AATACCCAAA TGTCCTGCA AGCCCGTTAA ATAATTCCT ATGCTACCCT 60
 TAATAACATA CAATGACCAC ATAGTGTGAG AACTTCCAAC AAGCCTCAA GTCCCTTGAG 120
 ACTCCCAAT ACCTAATAAG GCATGCGAAA TGTTCTCATG AACTACCCCA CAACACGCCT 180
 AAAACTCAA ACACCCAAA ATATNTCCTC CAATGTCCTG AAACATGAAC CCAAAAAGAG 240
 ACCCAACAATA AACTCGTGAC TTGTCCCNCT AAA 273

SEQ ID NO:3477

SEQUENCE LENGTH:272

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04088

SEQUENCE DESCRIPTION:

GATCCTCTCN ACCCTCCTCT AGCCATCCCT TGGGGAAGGG TGGGGAGAAN TATAGGATAG 60
 ACACTGGACA TGGCCCATTT GAGCACNNGG GCCCACTGG ACAACACTGA TTCCTGGAGA 120
 GGTGGGTGCN CCCCAGCTT CTNTCTCCCT GTNACACACT GGACCCCACT GGCTGAGAAT 180
 CTGGGGGTGA GGNNGACAAG AAGGAGAGGA AAATNTTCC TTGTGCCTGC TCCTGTACTN 240
 GTCCTCAGCT TGGGGNTTCT TCCTCCTCCA TN 272

SEQ ID NO:3478

SEQUENCE LENGTH:270

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04089

SEQUENCE DESCRIPTION:

GATCTTGATA TTNGGCCTCT TTGAAGAGAC AGCCCTGGCT GCTTTCCTNN CCTACTGCCC 60
 TGGAAATGGGT GTTNCCTTA GGATGTATCC CCTCAAACCT ACCTGGTGGT TCTTTGCCTT 120
 CCCCTACTCT CTTCTCATCT TCGTATATNA CGAAGCAGAA AACTCATCAT CAGGCGACGC 180
 CCTGGCGGCT GGTGGAGAG GGAACCTAC TATNAGCCCC CCGTCCTGCA CGCCGTGGAG 240
 CATCAGGCCA CACTCTGC ATCCGACACN 270

SEQ ID NO:3479

SEQUENCE LENGTH:267

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04090

SEQUENCE DESCRIPTION:

GATCACCAAC AGGGAAGAC ATCCTGGTTC TTTGATGTG GTGCATGTGA AGGATGCCAA 60
 TGGCAACAGC TTGCCACGA GGCTTTCCAA CATTTTGTG ATTGGCAATG GCAATAAACC 120
 TTGGATTTC CTGCCAGGG GAAAGGCAT TCGACTTACT GTTGCTGAAG AGAGAGATAA 180
 GAGGCTGGCC ACCAAACAGA GCAGTGGCTA AATTGCAGTA GCAGCATATC TTTTTTCTT 240

TGCACAANTA AACAGTGAAT TCTCAAA

267

SEQ ID NO:3480

SEQUENCE LENGTH:263

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04091

SEQUENCE DESCRIPTION:

GATCCCTGGA GTGCCTTGGT GTTCAAGCC CCTGCAGGAA GCAGAATGCA NCTTNTGAGG 60
 CACCTCCAGC TGCCCCCGGC CGGGGGATGC GAGGCTCGGA GCACCCTTGC CCGGCTGTGA 120
 TTGCTGCCAG GCACTGTTCA TCTCAGCTTT TCTGTCCCTT TGCTCCCGGC AAGCGCTTCT 180
 GCTGAAAGTT CATATCTGGA GCCTGATGTC TTAACGAATA AAGGTCCCAT GCTCCACCCG 240
 AGGACAGTTC TTCGTGCCTG AAA 263

SEQ ID NO:3481

SEQUENCE LENGTH:257

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04092

SEQUENCE DESCRIPTION:

GATCGGGAAC AAATGNAATC TGTGGATGCA TCAAGCTATC GTCAGTCAAA CCCCTTTAAA 60
 ATGTTGCTTT GGCTTTGTAA ATTTAAATAT GTAAGTGCTA TATAAGTCAG GAGCAGCTGT 120
 CTTTTTAAAA TGTCTCGGCT AGCTAGACCA CAGATATCTT CTAGACATAT TGAACACATT 180
 TAAGATTTGA GGGATATAAG GGAAAATNAT ATGAATGTGT ATTTTACTC AAAATAAAAG 240
 TAACTGTTTA CGTTAAA 257

SEQ ID NO:3482

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04093

SEQUENCE DESCRIPTION:

GATCTACATT TTGTACATAT TTATATAAAA TTTACCTTTA AGTATTTACT TAAAAAATT 60
 TAATGGCTTA ACTCGAATT GAAGACACAT ACTTCACTG TCCTTATTGT CCATTAACT 120
 GATAATTTN ATTTTCCTNG CTTTATAGA TTTNNCTATA TAGGAATCAA GATTTANGAA 180
 ATTTTGCATT AAAANTAGTG TACCAATGCT TCATATACGT TAGTTATTG CTATTATGTA 240
 GGGAAGAGGA TTGTN 255

SEQ ID NO:3483

SEQUENCE LENGTH:255

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04094

SEQUENCE DESCRIPTION:

GATCTGAAAT NAGAAATATC CAACATTGCA CGAGTATCTT TTTTTATNCC TCCACAGACT 60

CCGCCAGAGA CACCTAGTCC TGATGAAACG TCTGCTCCTT GTCCTAATAT TCATATCAAC 120
 AGCACCATTTC CTGGCATTCA CATTITAAAA ATTATGTGGA AGTGGATAGG AGAACTGCAG 180
 CTGTCAATAG CCTAGGGCTG AATTTTGTG AGNTAANTAA NATAAATCAT TCATCCTTTT 240
 TTTTNGNTTT ATAAA 255

SEQ ID NO:3484

SEQUENCE LENGTH:253

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04095

SEQUENCE DESCRIPTION:

GATCTAGGTG GTTGTGAATT GTGCATTACT GACTGCATAT GTTTGTGTAT GTGTAAATGT 60
 GGGCTCCCTG TTAAGTGGGG CTCATGGATA CGAGGCCTGA GGAAGTGTGG CTTGCTAGTC 120
 TGTTACGTTA ACATGCTTTT CTAAAATTGC TTCACGTGTT AATTCATTTA CTCCTGCATT 180
 CATTGACTGT TTTTGTCTT TTCCATTAC TTTGTACTTA TTTTTCAT TAAATTTTGC 240
 ATTTATTTTG AAA 253

SEQ ID NO:3485

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04096

SEQUENCE DESCRIPTION:

GATCCTAGTT CCTTCCTTCC CGAGTGATAC CCATGAACTG CCAGTAGAGG CTGCTATCGT 60
 TCCATGTGTA AGGAATGAAC TGGTTCAAGG CGCGTCCTAC CCAGTCATTT TCTTTACCTT 120
 ATACTAATTC TTCCTGAATA ATGTCTTCAG TTTCTTGAGG AGACTCCTAG TTTTGGTTTT 180
 CAAATTACTT GGAGGGCTGC CTAGGAATCT ATCTCCCTCT GAAATAAAGT TTCCTCATCT 240
 TCCACNNTAA A 251

SEQ ID NO:3486

SEQUENCE LENGTH:249

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04097

SEQUENCE DESCRIPTION:

GATCATACGG CCTTCCAGGA GACGCTGGGA TGTAAGATAC TCTTGGAGGN TGGCTCTGAA 60
 CTCGGGTGTC TGAATCACAG GGCAAGGGTA GCGTGGGCT GTGGCTAACA GCAGAGTCAC 120
 TTCCCTGGCC TAGCTTGGGG ACCTGGGGAG GAGGAGGTAG CTCTGGACAC CAGGGTTCTT 180
 CCCATTGTGG GAGAGTNAGT TTTTtagggg GAGACCTGTC CCCAGATTA AAGAACTGGG 240
 AGCCCTAAA 249

SEQ ID NO:3487

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04098

SEQUENCE DESCRIPTION:

5 GATCAAAGAA GAGAGTAAAG CTATGTCTTC AATTTAATTT CAATACCTGA TTTGTACTTT 60
 CCTTGAAAGC TTTACTTTAA AATACCTTAC TTATAGGCCT GGTGTCATGC TATAAGTATG 120
 TACATACAGT TTCACITCAA AAATAAAAAA AAANTCCCTA AAANCTCTCT ATACTCTCTA 180
 TAACANTNCT TTATCANGAN CTCTGGNCAA TGGTATTATT TNGGANANTC ATGGTGATGT 240
 ATTTNTNN 248

10

SEQ ID NO:3488

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS04099

SEQUENCE DESCRIPTION:

20 GATCTGTGTT GTAGAACATG AGGGTGTAAG CCTTCAGCCT GGCAAGTTAC ATGTAGAAAAG 60
 CCCACACTTG TGAAGGTTTT GTTTTACAAA TCACTTGATT TAACACACTC AGGTAGAATA 120
 TTTTAATTTT TACTGTTTTA TACCCAGAAG TTATTCTAC ATTGTNCTAC AGCAAGAATA 180
 TTCATAAAAG TATCCCTTTC AAATGCCTTT GAGAAGANTA GANGAAAAAA AGTTTGTATA 240
 TATTN 245

25

SEQ ID NO:3489

SEQUENCE LENGTH:246

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04100

30

SEQUENCE DESCRIPTION:

35 GATCCTGATN ATATTTGGCA GCTGTCTCTCC AGTCTTAAAA GGTTTGATGA CAAATACACC 60
 TTGAAGCTGA CCTTCATCAG TGGGAGAAC AAGCAGCAGC GGGGAAGCCGA GTTCACAAAG 120
 TCCATTGCTA AGTTTTTTTG ACCACAGTGG GACACTGGTC ATGGATGCAT ATGNGCCTGA 180
 AATATCCAGG CTCCATGACA GTCTTGCCAT AGAAAGANAA ATAAAGTAGC CACTTCTANA 240
 AGTAAA 246

40

SEQ ID NO:3490

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04101

SEQUENCE DESCRIPTION:

45 GATCCTGGGT ACTGAAAGNC TTAGGGAAGC TGGCCTGAGA GGGGAAGCGG CCCTAAGGGA 60
 GTATCTAAGA ACAAAGCGA CCCATTCAGA GACTGTCCCT GAAACCTAGT ACTGCCCCC 120
 ATGAGGAAGG AACAGCAATG GTGTCAGTAT CCAGGCTTTG TACAGAGTGC TTTTCTGTTT 180
 AGTTTTTACT TTTTTTGT TTGTTTTTTA AAGATGAAAT AAAGACCCAG GGGGAGAAA 239

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SEQ ID NO:3491

SEQUENCE LENGTH:239

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SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04102

SEQUENCE DESCRIPTION:

GATCTGGGGA AAGGAGAGAC CATGGTGTGA ATGTAGAGAT GCCACCTANC TCTCTCTAAG 60
GCAGGCCTGT GGATGAAGGA GGAGGGTCAG GGCTGGCCTT CCTCTGTNCA TCANTCTGCT 120
AGGTGGGGG CCCCNGNCCN NCCATACCTA CGCCTAGGGA GCCCGTCCTC CAGTATTCCG 180
TCTGTAGCAG GAGCTAGGGC TGCTGCCTCA GCTCCAAGAC AAGAATGAAC CTGGCTGTN 239

SEQ ID NO:3492

SEQUENCE LENGTH:244

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04103

SEQUENCE DESCRIPTION:

GATCTGTGTT TCCTCCCCAG TCATCTTTCT TGTTCAGAG AGGTGGGGCT GGATGTCTCC 60
ATCTCTGTCT CAACTTTATG TGCCTGAGC TGCAACTTCT TACTTCCCTA CTGAAAATAA 120
GAATCTGAAT ATAAATTTGT TTTCTCAAAT ATTTGCTATG AGAGGTTGAT GGATTAATTA 180
AATAAGTCAA TTCCTGGAAT TTGAAAGAGC AAATAAGAC CTGAGAACCT TCCAGAATCT 240
GAAA 244

SEQ ID NO:3493

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04104

SEQUENCE DESCRIPTION:

GATCCATAAA AGATTGTATT TTTATTACTA TTAAACAAG TGATTAAATT TAGTCTGCAC 60
ANNAGCAAG GGTTCACATG CATTCTTTTA TACTGCTGGA TTTTGTGTG CATCATTTAA 120
AACATTTTGT ATGTTTCTNC TTATCTGTGT ATACAGTATG TTCTTGAATG ATGTTCAATT 180
GTCAGGAGNN CTGTGAGAAA TAAACTATGT GGATACTGTC TGTTTATATT ATAAA 235

SEQ ID NO:3494

SEQUENCE LENGTH:233

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04105

SEQUENCE DESCRIPTION:

GATCGACTGT AAATAGAGGA CTTCTGGAAC ATTCCAAATA TTCTGGGGTT GAGGGAAATT 60
GCTGCTGTCT ACAAATGCC AAGGGTGGAC AGGCGCTGTG GCTCACGCCT GTAATCCCAG 120
CACTTTGGGA GNCTGAGGTA GGAGGATTGA TTGAGGCCAA GAGTTAAAGA CCAGCCTGGT 180
CAATATAGCA AGACCACGTC TCTAAATAAA AATTANTAGG CCGGCCAGGC AAA 233

SEQ ID NO:3495

SEQUENCE LENGTH:243

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04106

SEQUENCE DESCRIPTION:

GATCATGGAG ACCTGGCTGG TAGCTGTAAC AGAGATGGTG GAGTCCAAGG AAACAGCCTG 60
TCTCTGGTGA ATGGNACTTT CTTTGGTGGA CACTTGGCAC CAGCTCTGAG AGCCCTTCCC 120
CTGTGTCTCG CCACCATGTG GGTGANATGT ACTCTCTGTC ACATGAGGAG AGTGCTAGTT 180
CATGTGTNCT CCATTCTTGT GAGCATCCTA ATNNNTCNNT TCCATTTTNA TGACAGGANG 240
AAA 243

SEQ ID NO:3496

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04107

SEQUENCE DESCRIPTION:

GATCCAGAAC TGAGGTCACT GGGTTCTAGA ACNGNNACAT TTACCTCGAG GCTCTTCCAT 60
CCCCAACTG TGCCCTGCCT TCAGCTTTGG TGAAAGGGAG GGCCCTCAT GTGTGCTGTG 120
CTGTGTCTGC ACCGCTTGGT TTGCAGTTGA GAGGGGAGGG CAGGAGGGGT GTGATTGGAG 180
TGTGTCCGGA GATGAGATGA AAAAAATACA TCTATATTTA AGAATCCCAA A 231

SEQ ID NO:3497

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04108

SEQUENCE DESCRIPTION:

GATCTGCAGC CAGGCCTTTC TGAAGGNGTT ATTCTGNTAA AAATGGTCTN AGTTNTCTGA 60
AAAGCCAGCT CTTGAACCTC TTCACAACAG TATCAACACT GGCTTCTCCC GGTTTCATNTT 120
ATGCGTGCGA GAAGTCAGTG GTAACNTCTG CAGGGCTTAA TACATTAGTG GTAACGGTT 180
TAAAAACAA AGACTGTAAG CCTGTGTGTG CCACTGNNNG CTTCAACNGN N 231

SEQ ID NO:3498

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04109

SEQUENCE DESCRIPTION:

GATCCCAGTT TGCAGCAAAC CCCACACCCC AGCTCACACA GCAAAAACAA TGGACAGGCC 60
CAGAGGGTGA AGCAAACAGT GTCCCTTCTG GCTGTNTTGG AGCCTCCCA GTAACACCT 120
ATTTATTNA CCTCTTTCCC AAACCTGGAG CATTATGCC TAGGCTTGTN AAGAATCTNT 180
TCAGTCCCTC TCCTTCTCAA TAAAAGCATC TTCAAGCTTG TAAA 224

SEQ ID NO:3499

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04110

SEQUENCE DESCRIPTION:

GATCGGGAAC AAGCACGTTG TACCCTTGGC TGGACATGGC CAAGACACAA GGCATTCCAC 60
GGCGGCAAGC TGACCGCACA GCAGTCTGGC TTGATTTTCA GCCGTCATCA TTGGGTCTG 120
TTTTGACAGC TCTGCTGCCC ATAGGGACTG CGACTGGGNC CAGGTCAACC ACGCCAGGGG 180
GGTGTACCA GCCTTTTCTT TTTTNCCTTC TTTTNTTTT TCCCCCCTA AAGTTGTNNN 240
AAAGCNAANC CNTGGGAATA ATGGTTTNTT TGGANTNAAA CCCANNATT CAGN 294

SEQ ID NO:3500

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04111

SEQUENCE DESCRIPTION:

GATCCAAGTT TGATAACATT GGCATGAATG CCATGGCTAA CAAAGATAAT GCAAGTNTCA 60
AACAGCTTAG ATGGGAGGCT GAACGTGATG ACTGGCTACA CAACAGAGAT GCAAAAANGTA 120
TCATCAGGAA AAGGAAACAT TTTAAAANGA AGAGGNTTAA AACCCTCAA AAANCTAAAA 180
NCCAAGGGAA ATGAGTTATT ANTGTAANTN ATAGNTTAAN N 221

SEQ ID NO:3501

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04112

SEQUENCE DESCRIPTION:

GATCTAATTG TATTAGTATT GTGAATAATC ATGTGAAATG TTTTGAGACA GAGTACTATA 60
TTTGTGAATA TAATNNTATG GTTTTTTCA CTTAGAACCT TTCTGTGTGG AAAACTAAGA 120
AAATTGCTTT CTGCTGTATA ATCTGGCATT CATTGTAGAT TAAAGCTTAT TTTNCTGTGA 180
ATAAAACGNN NNCAATAAAA TACTATTCTT TAAAATTAAA 220

SEQ ID NO:3502

SEQUENCE LENGTH:226

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04113

SEQUENCE DESCRIPTION:

GATCTGGACA CCCTGTCTCC TGAGGAGCGC CGGGCCAGGC TCGGGAAGTN TGAGGCTCAG 60
CTCCAGTCGA GGAAGGAGTA CGAGCAGGAG CTCAGTGATG ACTTGCATGT GGAGCGCTAC 120
CGACAGTTCT GGACCAGGAC CAAGAAGTGA CCGTGGCTCC AGCCACCCCG GGACATTGCT 180
AAGATGGGAG GGCTGTTCTT AAATNACTCG TTCTTGAAGC TGCAAA 226

SEQ ID NO:3503

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04114

5 SEQUENCE DESCRIPTION:

GATCATGCCG AAAAAGTGGC GGAAAAGCTA GAAGCTCTCT CGGTGAAGAN GANNCCAAGG 60
 AGGATGCTGA GGAGAAGCAA TAAATCGTCT TATTNATTT NCTTTTCCTC TCTTTCCTTT 120
 CCTTTTTTNA AAAAATTTTA CCTGCCCCT CTTTTTCGGT TTGTTTTAT TCTTTCATT 180
 10 TTACAAGGGA CGTTATATAA AGAACTGAAC TCAAA 215

SEQ ID NO:3504

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS04115

SEQUENCE DESCRIPTION:

GATCNTTCT TAATGTACAT AGTGCTAACA TGAAGACCTT TTTNTGCACT ATATGCAAAC 60
 20 AGGGTAACTA ACTAAAACAA AGCCACTTTC AATCTTCAAT CCTTGAAGGT ATATCTAGGT 120
 TTATNACAGT AATTGTNTT ACATTNATG GTGCCTAGTA TTGACAAAAT GTTATTTCCT 180
 TACATTAAAC ATGACTCCAT AGACCTTTTC AAA 213

SEQ ID NO:3505

25 SEQUENCE LENGTH:212

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04116

30 SEQUENCE DESCRIPTION:

GATCTAATGT AAAATCCAGA ACTTGGACTC CATCGTTAAA ATTATTTATG TGTAACATTC 60
 AAATGTGTGC ATTAATATG CTTCCACAGT AAAATCTGAA AAACGTGATT GTGATTGAAA 120
 GCTGCCCTTC TATTTACTTG AGTCTGTGAC ATACATACTT TTTTATGAGC TATGAAATAA 180
 35 AACATTTNAA NCTGAATTNN TTAACNTGA AA 212

SEQ ID NO:3506

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

40 TOPOLOGY:linear

CLONE:HUMGS04117

SEQUENCE DESCRIPTION:

GATCAGAGAT GCTGTTTCATC AGTCCCAACA AGATGGCCTA GAAATCGCAT TCTCACCTCG 60
 45 CCTTGCTGCT GCTTTAATTC CAAGTTCTAT TTCTTCCCTT ATAGTTTTCT ATGGGAATGA 120
 GGCGGATACA GGAAACACCC TATCTCCTCT GTATTTTGT AGTGGAATTT CTATTTAAGG 180
 GGCTCATTAAGCATAGTAT TTATACACAA A 211

SEQ ID NO:3507

50 SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

55

TOPOLOGY:linear

CLONE:HUMGS04118

SEQUENCE DESCRIPTION:

5 GATCGAGATN CAAAGCCACA TNCTCTCTCA CCAAGNTAAA CTATTANAT TAATTGTTAG 60
CGGTGTTATG CTGCTTTCTT CTTTGACAAG GCCATGACTA AGAAGGCTCT AAGTAAAGGA 120
AGAATCATTT ATTCCATAGT CAGCTAACTG GTAGCAAAGC CTTCTNTTCC AAGACACCAA 180
GGGAGAGGGG AGGACATAAA TTATGCAAA 209

10

SEQ ID NO:3508

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS04119

SEQUENCE DESCRIPTION:

20 GATCCCCTCT TNAGTCCNCT GCCCCTTCCA AGGACACTAA TGAGCCTGGG AGGGTGGCAG 60
GGAGGAGGGG ACAGCTTCAC CTTGGAAGT CCTGGGGTTT TTCCTCTNC GCCCCTTGTG 120
GTTTCTGTTT TGTAATTTAA GAAGAGCTAT TCATCACTGT AATTATTATT ATTTTCTACA 180
ATAAATGGGA CCTGTGCACA GGAGGAAA 208

25

SEQ ID NO:3509

SEQUENCE LENGTH:322

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04120

SEQUENCE DESCRIPTION:

30 GATCCAAGCA TATAAAAAGC CTNTATATTT TTNAAAACA CATCTTAACT CCACGCTTTA 60
CGATATTATA AAAGTTGAAT GGTTCCTCTT GGTAAGGATA TTTGCTTACA AGTGCTAGGA 120
AATAACTNNC TGATAGCTGC GTTAACATAC TTNGTTTGC CTAGAGAGGG GCAATAAAAA 180
TGAACCAAAG GATATTTCCA GAAAGGATTA AGAAAGCTGT TTAAGANGGC CATGACTCTT 240
TAGGTGTGTA TGTGTACCTT TCAGCATCCT AGGAATTTN ATACTAAAAG CAAAATGTTT 300
35 TTCCCAGTTA GTCTTCTTCA GN 322

40

SEQ ID NO:3510

SEQUENCE LENGTH:205

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04121

SEQUENCE DESCRIPTION:

45 GATCCGNCCA CCTNGGCCTC CCAAAGTGCT GGGATTACAG GTGTGAGCCA CCGTGCCCGG 60
CCTCTTTTAA TTTATNCCTA AAATATTACC TTGAGGCCAA ATNCTGCGCT TAAGGAGAAT 120
GTGCACCAAG TGCTGGGGTG GGGGCTGGTT ATAAACGAGG CCACAAATNA TGCTTGTAAT 180
TAAATTGTGT GGTTCAAATC TGAAT 205

50

SEQ ID NO:3511

SEQUENCE LENGTH:205

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04122

SEQUENCE DESCRIPTION:

GATCCCTCAC TTTATTTATA TTCCCACTAT AACCAGTAAG TTCATTTCAT AGGCCCTATC 60
ATGCATTAAT CATTGNATGN NAGNAGTTAA TGAAAACTTT TCCTGTTACA ACGCCCATTG 120
CCGGCAATGA ACGTACCAAA ACCGCCAAGG AAGTCATTGT TATTGCACAA TACATGAGGA 180
CCTGGAGCTT TTCCAAAAGC TTAAG 205

SEQ ID NO:3512

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04123

SEQUENCE DESCRIPTION:

GATCTAAAC GGCTATTTAA TATGTTACAA GGCACCTGAG TATGGTTGCA TGTCCAAATA 60
TAAATGTTTT TAAATTAACCT CTAACATTTG GTTATAAAG TTTANCCATA ATAATAGAAT 120
TTTTAAACA CGNTTGTNTG GTTAACTCTT AGCATATTTT TCCAATAAT AAAGCTCAGT 180
ATTCGTCTGN GTTCTCAGNG GAAA 204

SEQ ID NO:3513

SEQUENCE LENGTH:201

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04125

SEQUENCE DESCRIPTION:

GATCTCTCTC ATTCATTTCA ATGTATTTTT ACTTTAAGAT GAACCAAAAT TATTAGACTT 60
ATTTAAGATG TACAGGCATC AGAAAAAAGA AGCACATAAT GCTTTTGGTG CGATGGCACT 120
CACTGTGAAC ATGTGTACCC ACATATTANT ATGCAATATT GTTTCCAATC CTTNCTAATA 180
CAGTTTTTTA TAATGTTGAA A 201

SEQ ID NO:3514

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04126

SEQUENCE DESCRIPTION:

GATCCAATTT ACATCCACAT TTTAGGTNCA ACAGCAAGAA GTTCAGAGAG AGATTTCCCA 60
ACCAGACATT GGGTCACTCA CTGGTCACCT TGCCAGTNCA TTTTATTAGA AGGGAATCTG 120
TTGTAGCAAA TGGGAATAAA CCTGGGTTTC TATAGACCCA GAACTGAAAA AATAAACATC 180
GTGCTGTTTT TAATTNGAAA 200

SEQ ID NO:3515

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04127

SEQUENCE DESCRIPTION:

5 GATCTTAGTT TTCTTTTGT TATTCCAG CTCATTTTT TCTTCTGGTC AGTTTTTTTA 60
 AGGGGGGGTG TTGTGGTTT TTGTTTTGT TTGCTTCTG AGAAAGCATT TGCCTTTCTT 120
 CCTCTCCCAA CATAACAATC GTGTAACAG AATGCGACTG CTNGATTAC CGATGTATT 180
 AATGTAAGTA AAAAAAGGAA AAAAAAGAA 209

10

SEQ ID NO:3516

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

15

CLONE:HUMGS04128

SEQUENCE DESCRIPTION:

20 GATCCATTCC CTGCAACTNA AGATTCTAAG GAACTGGGT TCTCAGTATA CAATGGGAAT 60
 GGTGAGNAGG AGGTAAAGAG TAGAAGACAG TATCAAGANT CCAGAGCCCA GCACCTGTAG 120
 TCCTAACTAT NCANATTCTT TGAGCCCAGG AGTTTGAGTC CAGCCTGGAC AACATATTGA 180
 GACCCCATC TCTCTAAA 198

SEQ ID NO:3517

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

25

CLONE:HUMGS04129

SEQUENCE DESCRIPTION:

30 GATCATGAAT AGGAGCCCAT GCTAGAAGTA CATTCTCTCA GATTGAACC AGTGAAATAT 60
 GATGTATTTC TGAGCTAAAA CTCAACTATA GAAGACATTA AAAGAAATCG TATTCTTGCC 120
 AAGTAACCAC CACTTCTGCC TTAGATAATA TGATTATAAG GNAATCAAAT AAATGTTGCC 180
 TTAACCTCAA A 191

35

SEQ ID NO:3518

SEQUENCE LENGTH:191

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40

CLONE:HUMGS04130

SEQUENCE DESCRIPTION:

45 GATCCAGGCA GCAAGAACT TGATGAATGC TGTGGTGCAG ACAGTGAAGN CATCCTACGT 60
 CGCCTCTACC AAATACCAAA AGTCACAGGG TATGGNTTCC CTCAACCTTC CTGCTGTGTC 120
 ATGGAAGATG AAGGCACCAG NGNNAAGCC ATTGGTGAAG AGAGAGAAAC AGGATGAGAC 180
 ACAGACCAAG N 191

SEQ ID NO:3519

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50

55

CLONE:HUMGS04131

SEQUENCE DESCRIPTION:

5 GATCTCCCC AAAGATTCCA GCGGGTGCAA CCCTGCNTGT TCGAGGTGGA GCTGCTCAA 60
 ATAGAGCGAC GAACTGAGCT GTAACCAGAC TGGGGAGGGG CAGGGGGAGA GGCCCCCATC 120
 AGGGACCAGA CTGTTCCAGA AAAAAACAA AAAACANAAA CAAACAAAA AACACTTAA 180
 AGCCAAA 187

10 SEQ ID NO:3520

SEQUENCE LENGTH:184

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04132

15 SEQUENCE DESCRIPTION:

GATCGAGACT CTNCCAGAAA ACAAACAAA ACAAAAAAAA ATCCGTTTCT AAGGACGGCG 60
 GGGATTCGGT TCGAGCCCGT GGCTGCTCTG TTTGTTTTG CTTTCTTGGT ATATAATCCT 120
 ANAAATAAAA GGGTAATATA AATATTNAG AAGAGGGAAA TTGCTGAAGA GTAGTAAGGG 180
 CAAA 184

20 SEQ ID NO:3521

SEQUENCE LENGTH:177

SEQUENCE TYPE:nucleic acid

25 TOPOLOGY:linear

CLONE:HUMGS04133

SEQUENCE DESCRIPTION:

30 GATCAGATGA CCATTGAGGA CTTGAATGAA GCTTTCCAG AAACCAAATT AGACAAGAAA 60
 AAGTATCCCT ATGGCCTCA CCAACCAATT GAGAATTAT AAAATTGAGT CCAGGAGGAA 120
 GCTCTGGCCC TTGTATTACA CATTCTGGAC ATTAAAAATA ATAATTATAC AGTAAA 177

35 SEQ ID NO:3522

SEQUENCE LENGTH:220

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04134

SEQUENCE DESCRIPTION:

40 GATCCCATCC GAAGCTCAGG GTATGGAGAG CGGGGAGCTC CNCCAAAGAT TCCAGGCGGT 60
 GCANCCTGGT GTTCGAGGTG GAGCTGCTCA AAATAGAGCG ACGAACTGAG CTGTAACCAG 120
 ACTGGGGAGG GGCAGGGGGA GAGGCCCCCA TCAGGGACCA GACTGTTCCA AAAAAAANC 180
 AAAAANCAAA ANCAACAAA AAAACACTTA AAAGCCCAAA 220

45 SEQ ID NO:3523

SEQUENCE LENGTH:172

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

50 CLONE:HUMGS04135

SEQUENCE DESCRIPTION:

55

GATCCTACCT AAGGGGCACA ACTAGTAAGG GAGTAGAGCT GAGATTGGCT CCAGAGTTCT 60
 TGTTTTCAGC CACCATTTTA TGCTGCCTCT CCAGTNATTT TTTTCCCAT TTTCTTCAGT 120
 NTTTCTATAG CAGAGATTG ATAATAAAAA GAAAATCCTA AACAATGAGA AA 172

5

SEQ ID NO:3524
 SEQUENCE LENGTH:169
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04136

10

SEQUENCE DESCRIPTION:
 GATCGCACTG CGCAGGGGTG CCACGGAGCT CACCCACGAG GACTACATGG AAGGCATCCT 60
 GGAGGTGCAG GCCAAGAAGA AAGCCAACCT ACAATACTAC GCCTAGGGCA CACAGGCCAG 120
 CCCCAGTNTC ACGGCTGAAG TCGCAATAA AAGATGGTTT AGGGTCAAA 169

15

SEQ ID NO:3525
 SEQUENCE LENGTH:169
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04137

20

SEQUENCE DESCRIPTION:
 GATCTCAGGC ATCGGATTAT TTCTCTGTA AATATTTAG AATGTATCTN TCCAAGATGA 60
 GAGCTCATTAA AAAGACAATT ACAAGGTTA TCACATCCAA AAGANTTATC AATAATTTN 120
 AAATATTATT AANCGTGTA TAAATNTNCA AAGTNCCACT TGCCTTAA 169

25

SEQ ID NO:3526
 SEQUENCE LENGTH:165
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04139

30

SEQUENCE DESCRIPTION:
 GATCAAAANG AGTNAANCTA TCAAAAAA AATTGTATAT TTGGGAAAAA TGGATTTTAA 60
 CATAGCTTTT GTATGCAGAT ATAAAACTGT AATTATGAAT ATAGTGGGCG TAGATAAACT 120
 CATAAGCTTA AATTCTAAAA ANGAAAAAGC TTATACCANG ATAAA 165

35

SEQ ID NO:3527
 SEQUENCE LENGTH:165
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04140

40

SEQUENCE DESCRIPTION:
 GATCAGCCGA TGACAGAGAT TGTAAGCCGT GTGTCGAAGC GAAAGTTGGA GCCGCCACGT 60
 GCGGGCNCCTG GTGCTTNANC TGTGCTGTAA CGACGAGAGC GGCGAGGATG TCGAGNTTCC 120
 CTATGTCCGA NACACCATCC GGTGACCCCG TGTGNTCCTN TAGGN 165

45

50

SEQ ID NO:3528

55

SEQUENCE LENGTH:165

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04141

SEQUENCE DESCRIPTION:

GATCCATTG AAAGTNATTT TGACATAAGG AGTAAGGTTA CTACTGATTC CTACTCAGGA 60

GGCTAAANTG GGAGGACCAC TTAAGTATGG NAGGTCGAGG CTATAGTGAG CCATTACTGA 120

GCCACTGCAC TACAATCTGG GCGACANAGC AAGACTCTGT CTAAG 165

SEQ ID NO:3529

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04142

SEQUENCE DESCRIPTION:

GATCCTGTGT TTGCAACTGG GGAGACAGAA ACTGTGGTTG ATAGCCAGTC ACTGCCTTAA 60

GAACATTTGA TGCAAGATGG CCAGCACTGA ACTTTGAGA TATGACGGTG TACTTACTGC 120

CTTGTAGCAA AATAAAGATG TGCCCTTATT TTACCTACAA A 161

SEQ ID NO:3530

SEQUENCE LENGTH:161

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04143

SEQUENCE DESCRIPTION:

GATCAGTCAT CCACCAGGAA CGAAGATTTC CTGAAGAAGA CCTGGTCCCT CTGGAGGTTG 60

CGGTGGCTGA AGGATGCATC ATGTGCTCCT ACCCTGCTCT ACCGCTTNT TGGGTCACAG 120

AGGCCAAATG TGAGAGCATT GAATAAATAT CTTAAGCTAA A 161

SEQ ID NO:3531

SEQUENCE LENGTH:159

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04144

SEQUENCE DESCRIPTION:

GATCTCGTGA AGCCCGCAAG GACCGAACAC CCCACCCCG ATTTAGACCT GCGGGTGCTG 60

CCCCACGTCC CCCACCAAAG CCCATGTAAG GAGCTGAGTT CTTAAAGACT GAAGACAGGC 120

TATTCTCTGG AGAAAAATAA AATGGAAATT GTACTTAA 159

SEQ ID NO:3532

SEQUENCE LENGTH:386

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04145

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCCTTACA GTAGAGGTGA CCCCTGTAAT ACCATCTGCT GCCGTGAGGA CCTGAACTCA 60
 CCTAACCCAA GTCCTGGAGG TTNNNNNGAC ACAAAGGTGG CAGATATCTA CCTAGCATCT 120
 CAGTACACAT CCTATGCCAT AAGTGGTCCC ACAGTACAAG GTGGCCTCCC TGTTCCTCGC 180
 TGGGACCGTT TCAACAAAAC TCTACATCAG GGCATGCCAG AGGTCTACAA CTTTGATTTT 240
 ATTACCATGA AACCAATTTT GAAACTTGAT ATAAATGNA GGAGGGAGAT GACGGACTAG 300
 AAGACTGTAA ATAAGATACC AAAGGCACTA TTTTAGCTAT GTTTTCCCA TCAGAATTAT 360
 GCAATAAATT TTTAATTTT GTCAAA 386

SEQ ID NO:3533
 SEQUENCE LENGTH:391
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS04146

SEQUENCE DESCRIPTION:

GATCAGATTA AACCATTTGAA GTTGGAAGTT CATNAGGCTA AGCCTGTNCC AGAAAAATCAC 60
 CCACAGTGGG ATACAGCAAT AGAGGGGGAT GAAGACCAGG AGGACAGTGA GGGCTTTGAA 120
 GATAGCTTTN AGGAAGAAGA GGAGGAAGAA GAAGATGATG ACTAAGCAGT ACTCTGAATG 180
 GNCCACAGTG TTTGCACATA TTTNCAATTT TTTNCTGTTT TGGAAGTGTA TCATAAACCA 240
 GAAACAGTAC AGAACTGATG TTGNGGGNGG TGTNGTTTTT TTAAGCTAGA NATGGGTGCA 300
 TAATATNACT AGGCAGTGGC GGTGCCTTGG TNCANCCTGN AAAATGTTAA GGCTTTNTTG 360
 AAACCTTTCC AGTNGGGGNT GGTCCNTTNA N 391

SEQ ID NO:3534
 SEQUENCE LENGTH:157
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS04147

SEQUENCE DESCRIPTION:

GATCCGCCCG ACTCGGCCTC CCAAAATGCT GGGATTACAG GCGTGAGCAT TCAAGTCTGG 60
 CGAGAGAGAT TGTTTCTAGA TGAGGGTGGG GCGGGGTGTC CTTAGCCCAA AGCTTGTGCC 120
 AGTCTCTATC GGAAATAAAT GCCCCCAAAA CCTCAAA 157

SEQ ID NO:3535
 SEQUENCE LENGTH:154
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

CLONE:HUMGS04148

SEQUENCE DESCRIPTION:

GATCTACAGC AAAACACAGC GGGAGAGGTT CGCCTGGGCT CTCGCCATGG CAGGAGAAGA 60
 CTTTGAATTC TAACGACGAG CCGTGTGTAA ACTTCTTTTG TATGTGTGTG TGTTTTTTTC 120
 ACTATTAAAG CAGTACTGGG GAATTTTGTG CAAA 154

SEQ ID NO:3536
 SEQUENCE LENGTH:151
 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04149

SEQUENCE DESCRIPTION:

5 GATCTAGGCA ATGATTAGA GGAAACCTCN TCACAAAAAC CCCAGAGGAA GAATATGACC 60
TGTGTTTCAA ATTTGCCTT TCTGAACTAT TTAAAATTAT GTGTATGTTT TTGCTTTGTA 120
TTTTAAAAGT AAAGCTGCTG TCCTCAAGAA A 151

10 SEQ ID NO:3537

SEQUENCE LENGTH:355

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04150

15 SEQUENCE DESCRIPTION:

GATCTATGAA AGCGGGGAGA GGGAACTGA ATATTAATTA TGAGCACAAA TTTGAAGGAA 60
AGAAAACAAA GAACCATTAT CTAATCAAGC TTGAAAAGTC CTGCATGTTT GCCTTTTATT 120
TTAGTGTGGA CGCCAACATA GACTGTCTAA GGTATTTTTT TCCCCAACAA CTGAATCTT 180
20 GGTCTGTTGGT ATGTAATCCA CTCTCTAGAG TCCAGTGTAC TTTAGACTTC ATCTGAGTCC 240
AATATATGTA CCACACTACT GTTTTATTAA TGTA AAAACC TTGTAATGA ATTTCAGATG 300
GGTGATTTAA GTGAGTCACA AGTCACAAAA CTTTGCTATT CATAGTTTAT CTNGN 355

25 SEQ ID NO:3538

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04151

30 SEQUENCE DESCRIPTION:

GATCTCTGCT TCCTGTACCT TGACATGCAA AAGGCTCTCC TAATACTCCA CATTCAAAC 60
GAAGAGGAAA ATTGAAATCT CTAATGAAGC TGCTGTGTGT ATTTATGANT ATTAATGAAT 120
AAAAACTGCT TGGATGTTT ACCTTAAA 148

35

SEQ ID NO:3539

SEQUENCE LENGTH:148

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

40 CLONE:HUMGS04152

SEQUENCE DESCRIPTION:

GATCAACAAC TNGTACTCT CGGGAAGACT CCTCTACTCA CAGCTGAAGA AAATGAGCAC 60
ACCCTTCACA CTGTTATTAC CTATCCTGAA GATGTGATAC ACTGAATGGA AATAANTAGA 120
45 TGTAATAAAA ATTNAGTTCT CATTTAAA 148

SEQ ID NO:3540

SEQUENCE LENGTH:147

SEQUENCE TYPE:nucleic acid

50 TOPOLOGY:linear

CLONE:HUMGS04153

55

SEQUENCE DESCRIPTION:

GATCAGAGTA AACAAAAGGA ATCTCAAAGG AAATTTGAAG AAGAACTGT AAAATCCAAA 60
 GTGACTGTTG ATACTGGAGT AATTCCTGCC TCTGAAGAGA AAGCAGAGAC TCCCACAGCT 120
 GCAGAAGATG ACAATGAAGG AGACAAA 147

SEQ ID NO:3541

SEQUENCE LENGTH:146

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04154

SEQUENCE DESCRIPTION:

GATCGTGGCG CATGGCTTGG GGATTAACT ACCCTTGANG AGGACCCTTG TCCCAAACCC 60
 TTCTTGTCT CTCCTCCAAA AGTAGCTTCC TCCAACCCGC AGCCTCTCTG CACACTAATA 120
 AAACATGTGG CTTGGAAAGG TTCAA 146

SEQ ID NO:3542

SEQUENCE LENGTH:144

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04155

SEQUENCE DESCRIPTION:

GATCTTTAAG GACAAGTTA TCCAGCATCC AAAAACTTT GGACTAATTG CATCATACTT 60
 GGAGAGGAAG AGTGTTCTG ATTGTTTTT GTATTACTAT TTAACCAAGA AAAATNAGAA 120
 TTATAAAGCC CTCGTCAGAA GGGN 144

SEQ ID NO:3543

SEQUENCE LENGTH:140

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04156

SEQUENCE DESCRIPTION:

GATCTGGGTT TTNATATCTT TATCTTCATT CAGTGAAGCA AGCCAAAAGC NCACATTTGT 60
 ATGCNTTAGG TCTTCTTAAA ATGGTATCTG TAAACATGTG TCCAATATAA AANCTATTTT 120
 NAATAAAANG TTACATGAAA 140

SEQ ID NO:3544

SEQUENCE LENGTH:138

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04157

SEQUENCE DESCRIPTION:

GATCAGCAAT GAAGAACTGG NCGGACAAAA TTNAACGTTN ATGTAATGGN ATTCCAGATG 60
 TAGGCATTCC CCCAGGTCT TTTCATGTGC AGATTGCAGT TCTNATTCAT TTGAATAAAA 120
 AGGAACCTGG AAANCAAA 138

EP 0 679 716 A1

5 SEQ ID NO:3545
 SEQUENCE LENGTH:137
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04158
 SEQUENCE DESCRIPTION:
 GATCTAAATG GGGCCAGGTG TTTACCCCTA TNTNGTTTTC TGCTAAATNA TGGAGGTTTG 60
 10 GGGAGTTCCT TCTCCACTTG TTTGTGGAGG CCTGGGGAGT TTTNNAGAC CCCAGTAAA 120
 ACTNGTTTAA TCCTAAA 137

15 SEQ ID NO:3546
 SEQUENCE LENGTH:136
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04159
 SEQUENCE DESCRIPTION:
 20 GATCCCTGTA GAGGTGGTAT TAAAGATGGT CACTGAGATT AAGAAGATTC CTGGTATTTT 60
 TCGAATTATG TATGACTTAA CATCAAAGCC CCCAGGAACT ACTGAGTGGG AGTAATAAAC 120
 TTCTTGTTCT ATTAAA 136

25 SEQ ID NO:3547
 SEQUENCE LENGTH:135
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04160
 30 SEQUENCE DESCRIPTION:
 GATCCTAAAA TNNCTACTT TTGTNGCCTT ATCAGTNCTT TGCAATCTGC CTGTGGTTAT 60
 CAGCACTTAA AGCACAATTT TGAAGGGGAA AAAAATGATA ATCACCTTAG TCCCAAAGAA 120
 ATAATTGTG ANNCN 135

35 SEQ ID NO:3548
 SEQUENCE LENGTH:134
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 40 CLONE:HUMGS04161
 SEQUENCE DESCRIPTION:
 GATCTGGACT GGCTGGGAGT GGGGAGGGCG TGGAGACAGT CTACGAAAG CGCTANAGGA 60
 CCCCCGAGAG GGTGCAGTGG AGCCCTGAGC ATTGTAATAT GCGGCCCAGC CTATAAACAG 120
 45 CCTCCGTGCT TAAA 134

50 SEQ ID NO:3549
 SEQUENCE LENGTH:134
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04162

55

SEQUENCE DESCRIPTION:

5 GATCCTTTGC TGAAACTNG GAGAGACCAG TCCCAAACAG AGGGGAATTT TAAGCCCTTC 60
 TCATCACCCA ATTGGATGTT TTTGCTTATA GCAAATTCCT GCAAAATAAA TAAATAAATA 120
 TTTGCAAAAC TAAA 134

SEQ ID NO:3550

SEQUENCE LENGTH:133

10 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04163

SEQUENCE DESCRIPTION:

15 GATCTATGGG AAGATACTTA TTTTCTGAG GTCCTTATGT CCTGTCATAT AATTAAAGAC 60
 TCAAGAGAAT TTATGTGAAA TGCTTCTGT ATGCCCAAAT CTTTAGATTA AAATTATATA 120
 GCTGCTCCTG AAA 133

SEQ ID NO:3551

20 SEQUENCE LENGTH:132

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04164

SEQUENCE DESCRIPTION:

25 GATCTCAGTT CCNTAAAAA TGATAAAAT TTTTCATGTA TATTACATAT CTACCTACCA 60
 GAAATCCTTT TTACAATTTT ATATACAATC ATTTAAGAC CTTTTTGAAA TAAATAATGC 120
 AAATGAACATA AA 132

30 SEQ ID NO:3552

SEQUENCE LENGTH:154

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

35 CLONE:HUMGS04165

SEQUENCE DESCRIPTION:

40 GATCACGGGG TGGNAGGNAA CCGNGGCGTC CCTGCNTGGG GCCCATGGGT GANACACTCC 60
 AGTACTGAGA CCTAGAGTCC AGATGCTTGT AGGAGCCAAG TCGTGTTCTA AGTATTTATT 120
 TAAACAAAA GAATCACGTT TTCCCATTTG TAAA 154

SEQ ID NO:3553

SEQUENCE LENGTH:213

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS04166

SEQUENCE DESCRIPTION:

50 GATCCTTAAT TGTAGCCTTT GAAGGATGCC CTGTGTAGAT TATTCAGTGC CACAAATTGA 60
 AAGCTTCCAT GTTTAATNTT ATCCTCTTGC TATATAAATA AAGCAAATAT ATTTAGGCCA 120
 GGGTCTCACT GAGGGGGAGC TGTCTTGCA TCTTTAGAG TAACTATTTC TATAAACATA 180
 TGCAACAGC CCTAAATAAA TCTAAAGTCT AAA 213

55

EP 0 679 716 A1

5
 SEQ ID NO:3554
 SEQUENCE LENGTH:125
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04167
 SEQUENCE DESCRIPTION:
 GATCCCAAGG GCCCAGATAA CGCCCCAAC TTCTTGGGGT TCACACGCGT CCTGAGACAT 60
 10 CTGGGAACTG CCTCTGCCTG GNCCAAAGCT ATTCCATTAA AACTTTATTG CTGTNCTTAC 120
 TCAAA 125

15
 SEQ ID NO:3555
 SEQUENCE LENGTH:127
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04169
 SEQUENCE DESCRIPTION:
 20 GATCTGTGTA CAATTTTNGT CACTANGACT TTCCTCCAAG AACTAAGCCA ACTTGATGTN 60
 NCAAGCACA GCTGTATATA ATGGTGATGT CATAATAAAG TTGTTTATC TTTAAGTAA 120
 AAGTAA 127

25
 SEQ ID NO:3556
 SEQUENCE LENGTH:126
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04170
 30 SEQUENCE DESCRIPTION:
 GATCAAGGAC TCTGGATAAT TGGCATAACA TCCTGGAATA GCTGAAACAG AGATATTATT 60
 CTCTGCTGTC CTCTGTTGTC TTTGTCTTTT CACGTCTTAA TAAAAGTGCT GGTGACAAGA 120
 GTGAAA 126

35
 SEQ ID NO:3557
 SEQUENCE LENGTH:123
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 40 CLONE:HUMGS04171
 SEQUENCE DESCRIPTION:
 GATCAGAGCC ATACCCCTCT TCACCAATGG GAAGTCAAGA CACCTATGGG TAAAAGTTCT 60
 CTCTGATGCA TGAAACTCA GAGTGATAAA GTAATTTTAA AATAAAATT TGGAGAAAGC 120
 45 AAA 123

50
 SEQ ID NO:3558
 SEQUENCE LENGTH:121
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

55

CLONE:HUMGS04172

SEQUENCE DESCRIPTION:

GATCTAAAAG TTTTCACACA TAAATTTTCAT TAATTTGAAA GATTATTTTT AAAGTGCATA 60
 GGTCCACTTG CCTCTAAATA AAATNAACCT AAAATAAAAA CAAACTATAC TTTGTGAGAA 120
 A 121

SEQ ID NO:3559

SEQUENCE LENGTH:121

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04173

SEQUENCE DESCRIPTION:

GATCTCCCC AACCCACAA AATGCTTAAA AGATAACTTA GCTCTTTNTT CAGGGCTCAG 60
 TCCTTTGGAT GTAATCCGAC TAGGCCAGTN AACCTAAATA ATAAATATCC TCCTCAACAA 120
 A 121

SEQ ID NO:3560

SEQUENCE LENGTH:120

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04174

SEQUENCE DESCRIPTION:

GATCCTGAGT TTTCTGGGAC AATTCCAGCT TTAATCAATA CATTTTGTTA AATGTGCCAT 60
 AAAATGAGAC TTTTACGCC TTTATAAGGC CTTAGATGTA AATAAACTCA CCCAAACAAA 120

SEQ ID NO:3561

SEQUENCE LENGTH:119

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04175

SEQUENCE DESCRIPTION:

GATCATTGTA TTCAGAGATT GTAAATGAAA AAATATAGAA ACTATTTAGT TTTGGTAGAT 60
 TTTTTCCTG ACAATGTGAC CAGACTGAAT TTCCTCATAA AGAAAAAATG GCGTGCAA 119

SEQ ID NO:3562

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04176

SEQUENCE DESCRIPTION:

GATCCCAGCA TTTCCATCG ACTTGTAATT GTTCTGCTA CCTGACAATC ATCGCCTTGA 60
 GTACTGGGAC AACCTTTGAT TACTCATTAT ATCCTCAATA AATATTTGTT GAACTAAA 118

SEQ ID NO:3563

SEQUENCE LENGTH:118

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04177

5 SEQUENCE DESCRIPTION:

GATCCTGGCT AGANTGNTAA TAAAAAGTAT TTAATTTGAA GCACCATTN ANTGTTGTA 60
CTAGTAGAAA ATGATGTGAA TTTCTTTCT GTTCGGCTCC TATTTCTC ATCATTTN 118

10 SEQ ID NO:3564

SEQUENCE LENGTH:82

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04179

15 SEQUENCE DESCRIPTION:

GATCATAGTC GGGCATACTT ATCTATATCC NTAACCTCTA TATCTTTAAA TAAATGTGAG 60
NACTGTTCTC ATGGAGANGA AA 82

20 SEQ ID NO:3565

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04180

25 SEQUENCE DESCRIPTION:

GATCTAAAGC NTTNTGTCA GATTATTTAA TATNATGACT TCATGCTTTA TTATGCCTTA 60
TNATGGCTGA CGTATTACTG TGGTGAAACA AAATATCTTT AAAAGTTAAA ACATCCAGAT 120
ATATAAGCAA TTTNCCCTA AGGATAAAGT ACCTTTAAGC ATGAGTGTAT CACAGCTTTC 180
ATTAGGNAAA CTTTTCATTA CATACTTGT TAAN 214

30 SEQ ID NO:3566

SEQUENCE LENGTH:102

SEQUENCE TYPE:nucleic acid

35 TOPOLOGY:linear

CLONE:HUMGS04181

SEQUENCE DESCRIPTION:

GATCCCNAA TGTGTATGAA TGACTGAGGC TTTGTAAATT AAGGGACGTT TGTTTGAATA 60
AAGTTATTG ATGGGGTCAA AGAAGCCATA TGTGATTGA AA 102

40 SEQ ID NO:3567

SEQUENCE LENGTH:101

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS04182

SEQUENCE DESCRIPTION:

GATCCTCTCC TTAGTCTTAG CTCATGGGGC TCTTTATAAA GGAGTTGGGG GGTAGAGGCA 60
GNAAAATNGG AACCGAGCTG AANGCAGAGG CTGAGTTAGG N 101

55

5 SEQ ID NO:3568
 SEQUENCE LENGTH:99
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04183
 SEQUENCE DESCRIPTION:
 10 GATCTGCAGT GCTTCACTGG AAATAATTTA TTCATTGCAG ATACTTTTAA GGTGGCATT 60
 NATTCATTTT CTGTGCTTTA AATAAACAAA TGTACCAAA 99

15 SEQ ID NO:3569
 SEQUENCE LENGTH:97
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04184
 SEQUENCE DESCRIPTION:
 20 GATCACCTG GGCACATGTT GTCAGGACCT CCTGGGGTTG TGTCATGGAT GCGTGTCTC 60
 AACCTTAGCA AAATAAACTT TCTAAATTAC TGAGAAA 97

25 SEQ ID NO:3570
 SEQUENCE LENGTH:95
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04186
 SEQUENCE DESCRIPTION:
 30 GATCTTCAGT GTGTCTGCAT AAGCTAACTT AAGATGAATT TAAGTACANN TTTCTGAAAT 60
 ATTTCTATTG AAATAAATTA CTAAAAATTA NNAAA 95

35 SEQ ID NO:3571
 SEQUENCE LENGTH:94
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04187
 SEQUENCE DESCRIPTION:
 40 GATCTTTGTG AATTCTATGA ATGTATTAAG TTATCATATG TACTCCCCAA AATAGGTACA 60
 TCTATTATGT ATCAATAAAA AANTTTAAAA CAAA 94

45 SEQ ID NO:3572
 SEQUENCE LENGTH:93
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04188
 SEQUENCE DESCRIPTION:
 50 GATCCCTTGA GCCGAGGAGG TTGAGGCTGC AGTGAGCTAT GGTACACCA CTGCACTCCA 60
 GCNTTGGTTA TNATGCAAGA CCCTGTTTAC AAA 93

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5 SEQ ID NO:3573
 SEQUENCE LENGTH:89
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04189
 SEQUENCE DESCRIPTION:
 GATCGCACAC CTTTGCAACA GATGTGTTCT GATTCTCTGA ACCTACAAAA TAGTTATACA 60
 10 TAGTGGAATA AAGAAGGTAA ACCATCAAA 89

15 SEQ ID NO:3574
 SEQUENCE LENGTH:90
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04190
 SEQUENCE DESCRIPTION:
 GATCAGTGTCTCTAGTCCTA CCCAGTTTTA AAGTTCATGG TAAGATTGA CCTCATCTCC 60
 20 CTCAAATAAA TNTATTGGTG ATTTTNGAAA 90

25 SEQ ID NO:3575
 SEQUENCE LENGTH:87
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04191
 SEQUENCE DESCRIPTION:
 GATCCGCCAG GTGCGGGCGC TACTGCAGGC ACAGCAGGCC TAGGTCCTCC CACACCTGCC 60
 30 CCCTAATAAA GTGGGCGCGA GAGGAAA 87

35 SEQ ID NO:3576
 SEQUENCE LENGTH:87
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04192
 SEQUENCE DESCRIPTION:
 GATCCACCCA CACCTAAGTC ACAGAATTTC TAAGTTCCCC AACTACTCTC ACACCCNTTT 60
 40 AAAGATAAAG TATGTTGTAA CCAGAAA 87

45 SEQ ID NO:3577
 SEQUENCE LENGTH:83
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04193
 SEQUENCE DESCRIPTION:
 GATCAAACCTG AATGAAACCC CCACACACAC ACACATGCAT ACACACACAC ACACAGCCAC 60
 50 ACACACAGAA AATATACTGT AAA 83

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EP 0 679 716 A1

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SEQ ID NO:3578
SEQUENCE LENGTH:83
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04194
SEQUENCE DESCRIPTION:
GATCCCTATT CTGCGTGTAT GTGTTTGAC ATGAGTGTT GTAGACCATA GACCATTAAA 60
AAATACGGAA TTCAAAAGTT AAA 83

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SEQ ID NO:3579
SEQUENCE LENGTH:84
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04195
SEQUENCE DESCRIPTION:
GATCTATGAA TGTITTTNTT AAAATTTACA AAGCTTTGTA AATTAGATT TTTTAATAA 60
AATGCCATT GTGCAAGNTT TAAA 84

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SEQ ID NO:3580
SEQUENCE LENGTH:112
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04196
SEQUENCE DESCRIPTION:
GATCACATAA AGGCAAGAGG ATACTTCATG AATAATACAT TTNAATGCAA ATAAACAGAT 60
GGTTCACTTC TACTAGCTAT NNCCCTGTCT TNNTATACAC TGAGTAGATT AN 112

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40
SEQ ID NO:3581
SEQUENCE LENGTH:74
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04197
SEQUENCE DESCRIPTION:
GATCTATGTC TGTGTGTGGC AATGTGAGGG TGATACTCTC TCACTCTAAT AAAGTTGGCA 60
CTTCTCCGAG TAAA 74

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SEQ ID NO:3582
SEQUENCE LENGTH:74
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04198
SEQUENCE DESCRIPTION:
GATCTGTAT GTGTGTTGAG ATTTAGAGGT TTCATTTATN TTGTCTGCTA ANAAATTGTT 60
ACTCTAATAA TAAA 74

5 SEQ ID NO:3583
 SEQUENCE LENGTH:71
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04199
 SEQUENCE DESCRIPTION:
 10 GATCACTGTA TAGACTGTTA AATTGATTT CTTATTACCN ATTGTAAAT AAAGTGTGTG 60
 AGACAGACAA A 71

15 SEQ ID NO:3584
 SEQUENCE LENGTH:71
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04200
 SEQUENCE DESCRIPTION:
 20 GATCTATTTT TCTGTCTACT TTGGANATGA TTGCATAATA AATAAAATTT TACTGTTTTT 60
 TTTAAAGGAA A 71

25 SEQ ID NO:3585
 SEQUENCE LENGTH:69
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04201
 SEQUENCE DESCRIPTION:
 30 GATCTAAAGA TGTTTAGGGA AGAGCTCGAC TAAAGAACAA TGAAATAAAT GGTCCAAGGG 60
 GAAGTCAAA 69

35 SEQ ID NO:3586
 SEQUENCE LENGTH:65
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04202
 SEQUENCE DESCRIPTION:
 40 GATCAAAAAT GTAAGTCTAT TGGTAGAGAT TAAGTAAAGT ATTTATTGCT ACATCATAGT 60
 TGAAA 65

45 SEQ ID NO:3587
 SEQUENCE LENGTH:53
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04203
 SEQUENCE DESCRIPTION:
 50 GATCTGTGTT GCATTTCAAA ATAAACTGGT GTGTGCTCTG CCTGGATTG AAA 53

55 SEQ ID NO:3588

EP 0 679 716 A1

SEQUENCE LENGTH:153
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04204
 SEQUENCE DESCRIPTION:
 GATCTCAGCC CAGGACGNCA AGCAAGCAGG TCTTGTGAGC AAGATTGTC CTGTTGAGAC 60
 ACTGGTGGA GAAGCCATCC AGTGTGCAGA AAAANTTGCC AGCAATTCT AAAAATTTGT 120
 AGTAGNCGAT GGNCNAAGNA TCAGTGGATN CAN 153

SEQ ID NO:3589
 SEQUENCE LENGTH:29
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04205
 SEQUENCE DESCRIPTION:
 GATCCAAATA AAGGTAGCTG CTGACCAAA 29

SEQ ID NO:3590
 SEQUENCE LENGTH:64
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04206
 SEQUENCE DESCRIPTION:
 GATCTCTCTA CAAGAGCCCC TGCCCCCTCTG TTGGAGGCAC AGTTTITAGAA TAAGGAGGAG 60
 GAGN 64

SEQ ID NO:3591
 SEQUENCE LENGTH:64
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04207
 SEQUENCE DESCRIPTION:
 GATCCTTTGC GTGACAGTCT TGTATGGAAA ACAGATGCTG ACAGAATTGT AGACTACCAT 60
 NCCN 64

SEQ ID NO:3592
 SEQUENCE LENGTH:63
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04210
 SEQUENCE DESCRIPTION:
 GATCTCGCCT TGTTCTTAC AAGCAAACCA GGGTCCCTTC TTGGCACGTA ACATGTACGT 60
 ATN 63

SEQ ID NO:3593

SEQUENCE LENGTH:63
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
5 CLONE:HUMGS04211
SEQUENCE DESCRIPTION:
GATCTTTGCG AATTACAATG CATATATGTC TATTTATTCA ATATCTGTCA TATAATANCT 60
ATN 63

10 SEQ ID NO:3594
SEQUENCE LENGTH:58
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
15 CLONE:HUMGS04213
SEQUENCE DESCRIPTION:
GATCTTAAGA AAACCTCATA CTGTATGAAT AAGAAAATAA AATATTTAAA ACTTGAAA 58

20 SEQ ID NO:3595
SEQUENCE LENGTH:64
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04214
25 SEQUENCE DESCRIPTION:
GATCGCCAAG TTCAAAGCTG TGCACATGTG GACACTCAAT AAATGTTTCAT TGGTGAAAAA 60
CAAA 64

30 SEQ ID NO:3596
SEQUENCE LENGTH:56
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04215
35 SEQUENCE DESCRIPTION:
GATCCAAAAA GAGTCGACCN GCATTNTTTA TATTAAAAAT AAAGTCAAGA TTAAA 56

40 SEQ ID NO:3597
SEQUENCE LENGTH:52
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04216
45 SEQUENCE DESCRIPTION:
GATCTTTGTT AATGTCTTGA TTCTGTTTCGC AAAGCACAGA CTAGTGCTTA AA 52

50 SEQ ID NO:3598
SEQUENCE LENGTH:52
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS04218

SEQUENCE DESCRIPTION:

GATCGCACCA CTGAGCTCCA GCCTGGGCAG CTGNATGAGA CTNCATCTCA AA 52

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SEQ ID NO:3599

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS04219

SEQUENCE DESCRIPTION:

GATCTGGAGG GACACACAGG AGACACCTGG CATAACCAAA AAATGATTAA A 51

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SEQ ID NO:3600

SEQUENCE LENGTH:51

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS04220

SEQUENCE DESCRIPTION:

GATCGAAAAC ATATAGANAA AATAAAATGT GTGGTTGCAC CTGTACTGAA A 51

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SEQ ID NO:3601

SEQUENCE LENGTH:466

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04247

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SEQUENCE DESCRIPTION:

GATCTAGAGG AGGATTGCA GGAAGAGCTC GTGGAAGAGG TGGTGACCAN CAGAGTGGTT 60
 ATGGGAAGNT ATCCAGGCGA GGTGGTCATC AAAATAGCTA CAAACCATAC TAAATNATTC 120
 CATTTGCAAC TTATCCCCAA CAGGTGGTGA AGCAGTATTT TCCAATTTGA AGATTCATTT 180
 GANGGTGGCT CCTGCCACTG CTTAATAGCA GTTCAAATAA AATTTTTTGT ATCAAGTCCC 240
 TGAATGGAAG TATGACGTTG GGTCCCTCTG ANGTTTAATT CTGAGTTCTC ATTAAAAGAA 300
 ATTTGCTTTC ATTGTTTTAT TTCTTAATTG CTATGCTTCA GANTCATTTG TGTTTTATGC 360
 CCTTTCCCCC AGTATTGTAG AGCANGTCTT GTGTTAAAGC CCAGTGTGAC AGTGTCATGA 420
 TGTAAGTAGT NCTACTGGTT NTTAATAAAA NCCNTNTTGT ATGAAA 466

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SEQ ID NO:3602

SEQUENCE LENGTH:429

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

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CLONE:HUMGS04248

SEQUENCE DESCRIPTION:

GATCTATAAA TCAAGAAAAT CCATTGTCAT AACCATTTTT AAAAGTCAAT AATTAAGACA 60
 TCCTTAATTA AAAAGTTTCA AATCTAGACA CTAAATGTGT GTGAATGTAC AAAGAAAACA 120
 AACCATTGCT TATGCTGTTA TATACTAGAG AAATTTTGTT TTGCTTGCTG TTTTAACTTG 180
 ACAGATGAAG GACTTTAGTT GAACTTCATA TTGTAAGAAC TGTTAATAAA AGTTGTCAAG 240

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TAAAAAGCGC TATATCTAAA AAGACTTTAT GAACAGTTAT TCTATCAACT TTAAAGGGT 300
 TTAAACCTG CCCAGAAATT ACCTTGGTAT CTGAAGTTTC CCTCTGTCTC CTCCCTCTAA 360
 TTNAGGCTTG TTATTTGTCA TGCACCAGCA TTTGGGGGNT AATAANAATT TCTTNGGTTT 420
 TNGTGGAAA 429

SEQ ID NO:3603

SEQUENCE LENGTH:419

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04249

SEQUENCE DESCRIPTION:

GATCTGTTGT TTGTTTTTAA GGTGGTGTTC TGTTAACTTC CAGCAGGATG CAGAATCTAA 60
 CTGGTAAACC TATAAATTGG TCAAATTNA CCCATGTTGT TTCTTTGAAA ACAATGTATA 120
 TNCTCTAATA TTTGGATATA GGGTATATGA NCATTAATGC AACTTAATTG TATTTCCAAG 180
 TACAGTACAT ATGTNCAGAT TTCTTTTCT AACCTTATTT AGTGATAGAG GTGTGGTAAA 240
 CNCTTCCATT ATGTTTATGT ATTANCACTG TAATTTTGTG ATTTTATAT ATTTNGATGT 300
 TATGTAAC TAATGCATACA GGATTAGGTA TTTCTTCTG TATTCCTTT TATGTGGAGA 360
 TGATATTTT ACATAGCAAA GTATTGTAAT GCATTAATAA TAAATGGTCA ACCATTAA 419

SEQ ID NO:3604

SEQUENCE LENGTH:419

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04250

SEQUENCE DESCRIPTION:

GATCTGCTAG TTCCAGGCCT CTAAGACAGG AACGTATGTG CCATAAGTGN GTCTACTTCA 60
 CAGACTCAAT GAGGCAGAAA TTATTGTAGT TTTCTCCTAT TTCTCTGCA CCCAACTTTC 120
 TNCTTGATTT TCAAAGGCCA GGCCATGTAC ACTAACGTCC TTGAAATTG CAGTTCTGTA 180
 TGCTTCTATT CCAATCATT CATTACCAAT AAAACGGAA TACCACCTT TCCATTTTAT 240
 AGNCCTCATC CCCTATTTCT GTCAGACAGT TATATGACAG GGTGGNCNGN GGGCCTCTTA 300
 GTTCATCCAA AGTCTNNCT GNAGTGCTAG NCTTCAGAC TCTTATCACT GGAAATCNTT 360
 AAGGGTTGAG GGGGNTTAN TTTCCAGNA CTTGTGNAGG GNTTCACTG TCAAACTN 419

SEQ ID NO:3605

SEQUENCE LENGTH:404

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04252

SEQUENCE DESCRIPTION:

GATCCGACAC AGAGAACAGG AGGNACTAGA GGCACANAN AGNAGGGCTT TAAGCCAAAC 60
 TACATGGAAA ATGGTGATAA AAGAAAATNT GGCTGAAGTT ACCCGAAGTT CAGCTTGCA 120
 TGTAATTCAG AAGAGTTAAG ACCAGAAGTA CTGGAATCAT ACTTCCTTC AGTCTTGCCA 180
 CTTGCCTAGT GAGGCTTTTC CGAACCTGGA AGGAGACGTC TAGAAATCCC AACTTTGCTG 240
 TGTAAGGACC ATTAGCTGCA AGTCAGTGA AGTCTATAGA AAANAGTGTG AATTCCATAG 300
 TGGTCTTGAC TTCTTAGCAA GGATTTGGA TAAGTCTAAA ACTTCAGACT TAAAGCTTTG 360

AAGCATGTTA ACTGCATGAN ATATTAANCA TTTCGAACTT CAAA

404

SEQ ID NO:3606

SEQUENCE LENGTH:403

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04253

SEQUENCE DESCRIPTION:

GATCCATGAA TTAACAGAGG CATATATTTA AAATGAAATT TAATGAGCAC TTAGTGACTT 60
 CATTTGTTC AAGATATTTG ATTTCTATT GTGTGCATGG GAGGTTTACA AAAGACAGAC 120
 TGTCCCTATG CTTGTNCAGC TTACAATCTA TTAACTATT AGAGGCCCTG TGAGATGTAG 180
 GCAGTTATTT ACAGATGAGA AAATAACAC AGCAGTGGCA ATGCTGGGAA TGGCCAACAG 240
 GCTTGGAATT CAACTCAGTT TAGCACCAAA GCCAGTNCCT TTAAGACCTG AAGTTCAACA 300
 GTGGATTCTT TACCCAAATA GTTTTAAAG TATGCTCTAA GGNCCAATGT TTTAATGAA 360
 ATCTTGGNTT NCAAGTNGG NNTAAAAGG TTCTGAGCAT AAA 403

SEQ ID NO:3607

SEQUENCE LENGTH:396

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04256

SEQUENCE DESCRIPTION:

GATCTTACTT CGTTGACCCA TATTTTCCC CTGACCAAGT TACCTGTAAA CTGGAATTTG 60
 CAAGGGGATG CTGTGATGAT AACCCCTTC TATTGCTGTA ATGTCATAT AACCTGGGAA 120
 ACTGAGAGAA GGGGATGTGT AAATAAAGC TTAACATTT TAGTAATGTG TTAATATGTC 180
 ACTCTCTCTT ACCCTGTTTC CCTTTTTGC CAGATGATGA TTTTTTATT TTTATTTTGT 240
 ACTTTACTGG ATGACTGTGA AGCGNTGAGT ATTGGGTTGG GGTAGGTGTG TTGATTTTGA 300
 GAGTGCATGT TAAGACCTGA AGGGGAATA CTTGAGGATG ACTTAAGAAG CATCCCATGC 360
 AAATATCTTG TTTTGGCNG AATAAATAT TTCAAA 396

SEQ ID NO:3608

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04257

SEQUENCE DESCRIPTION:

GATCTGCCCC CCTTGGCCTC CCAAAGTGCT GGGATTACAG ACATGAGCCA CCACGCTTGG 60
 CCGGGATAGT ATATTTTAT AGCACTTCCC TACTGATTG CTGCCTTCTC TGTGGCTACA 120
 AGGGACCCAC AGAATTACAG GGAAGTTACA GGGNNGCAGG TTTCATCTCA ATATTGGGAG 180
 AGATTTCAAA CAATCACACC NNNNNNCGA AGGAGTGGGC TGTCATAGG AATTTTATT 240
 CCCAGTCCGT CAGGAATTTT GTAGAAGGC TTCATGTGCT GGTACCAATA GGACAGGAAG 300
 ATTTAATCA GCTTACTAT CTATGTTTTT TTATGGAAAC TGTGTGTATG TATACATACA 360
 TTTTCAAAA AGNANAAATT AAATGATTAT AG 392

SEQ ID NO:3609

SEQUENCE LENGTH:392

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04258

SEQUENCE DESCRIPTION:

GATCCGCCCA CCTCCGCCTC CCAAATTGCN GGGATTACAG NCCTNAGCCA TNCACACCCG 60
GCCAATAAAA ATTTTTTTAA AGCTAAATTT GACTCTCATG CAAATAAGAT AAAATGAACA 120
TATGTTAAAT ATTTTAACTT AATGAGAGAA ATAGTAAGAT GTTACCAGTT ACTTGATGAT 180
GGAGGAAAGG ACGAAAAGCC AAGGAATACA TGGAATGCAG CTCTAGGTGC TGAAAAAGGC 240
ANGGAAAGGT TCTACGTTAG NGCTTCCAGA GGGAGCTCAG CCCTGTCANC ANCNTNGTTT 300
CAGCTCAGTC ATATCGNTGT TTAGACTTTC TGGTCCCCAG NGCTGGGCGG GGGATATATT 360
TCCTGCTGTT TTAAGNCNCC NNATTTTGTG GN 392

SEQ ID NO:3610

SEQUENCE LENGTH:391

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04259

SEQUENCE DESCRIPTION:

GATCCTAAGG GGTTCAGGGG GACCCTACCC CCACCTCAGG TTGGGCTTCC NTGGCCACTC 60
ATGCTCCACA CCAAAGCAGG ACACGCCATT TTCCACTGAC CACCCTCTAC CCTGAGGAAA 120
GGGAGACTTT CCTCCGATGT TTATTTAGCT GTTGCAAACA TCTTCACCCT AATAGTCCCT 180
CCTCCAATTC CAGCCACTTG TNAGGCTCTC CTCTTGACCA CTGTGTTATG GGATAAGGGG 240
AGGGGGTGGG CATATTCTGG AGAGGAGCAG AGGTCCAAGG ACCCAGGAAT TTGGCATGGA 300
ACAGGTGGTA GGAGAGCCCC AGGGAGACGC CCAGGAGCTG GCTGAANGCA CTTTGTGACA 360
TGTAATGTAT TATATGGGGT CTGGGGCTCC N 391

SEQ ID NO:3611

SEQUENCE LENGTH:386

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04261

SEQUENCE DESCRIPTION:

GATCCGACCG CGTGNTGCCG CTCTGCTCTC TCATACGCGT GTATGTTTGG TTCCATGTCA 60
CAGCCCCCTA GGAGCCAGTN ATGCTCGGCC TTGCGCCCGT NCCACCTCCC AGGCCACCCT 120
TCCTGGGCTT CTGGGCCACC TGCCCTCGGG GGGCCCTGC NAGGGTGCCT GGNGTTCCCA 180
CGTGTCCCGG GGCTTTTCCA GGAAGCCCGA GCCCAGGACC TGTGGCAGA GTTGGCAGGG 240
TTACATTTTT NAAGCACCTG CTCCTTTTNT TGCAGTGTAT TTTCTACAAC CAGATTGTAT 300
TAATATTTTT AACTTTGCCC TTTTAAAAAA TATACCTAAT ACAATATATT TAATTNTGAA 360
TTAAACTCTT AAACTTTCT TCCAAA 386

SEQ ID NO:3612

SEQUENCE LENGTH:375

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04264

SEQUENCE DESCRIPTION:

5 GATCCCTTTG GGGCATGAAG TGTGACAAAG GTGGGCTCCT GAAAGGANTG TNCCAGAGAA 60
 ACCAGCTAAA TCATGACACC TTCAATTTGC CATCATGACG CAGACCTGTA TACATTAGGN 120
 TAAATCTGAA TTTCCACTGC TTTGGAGAGT CCCACCCACT AAGCACTGNG CATNNAACA 180
 GGTTCCTTTG CTCAGATGAA GGAAGTAGGG GGTGGGGCTT TCCTTGTGTG ATGCCTCCTT 240
 AGGCACACAG GCAATGTCTC AAGTACTTTG ACCTTAGGGT AGAAGGCAAA GCTGCCAGTA 300
 10 AATGTCTCAG CATTGCTGCT AATTTTGGTC CTGCTAGTTT CTGGATTGTA CAAATAAATG 360
 TGTGTAGAT GGAAA 375

SEQ ID NO:3613

SEQUENCE LENGTH:372

15 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04265

SEQUENCE DESCRIPTION:

20 GATCCTAGAC CAGCATGCCA GTGTGCCAAG GCCACAGGGA AAGCGAGTGG TTGGTAAAAA 60
 TCCGTGAGGT CGGCAATATG TTGTTTTCTT GGAACCTACT TATGGTAACC TTTTATTAT 120
 TTNCTAATAT AATGGGGGAG TTTCGTACTG AGGTGTAAAG GGATTTATAT GGGGACGTAG 180
 NCCGCNNTCC CNNGTGTTGT AGGTTTCTCT TTTTCAGGCT TATACTCATG AATCTTGTCT 240
 25 GAAGCTTTTG AGGGCAGACT GCCAAGTCCT GGAGAAATAG TAGATGGCAA GTTGTGGGGT 300
 TTTTTTTTTT NACACGAATT TGNNGGAAAC CATTAAATCA TTCAAAATAA TAANCTNTTT 360
 TTATTNNGGA AA 372

SEQ ID NO:3614

SEQUENCE LENGTH:372

30 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04266

SEQUENCE DESCRIPTION:

35 GATCTAAATA TATATTTTGT ATATTATAAT ATTTTAGGAA TAGCTTAATT AAGANCTCAC 60
 AGACTTTGAC AAAGTGGTAA CTAGACTTTT AATTACTAGA TTCTTCAAAT TAGGCTTAAT 120
 GCCTGCTAGC ATGCCAATCC AATCCCATGA CTGATGTTAT TATACTATAT GGCAATACA 180
 AAGTTGTAGT ATTATGGTTC TTGATGGTGT GATTACTTA TGTAAATTAT GTACAAATTT 240
 40 AAGTTCAATG AAACACTGAT TTAATGTACT GAAAGGTAAA TAGTACCATA GTGAATTATT 300
 TCCTGTCTTG CCTTAGGTTT ATTTTATNA TCTTCAATAT TAGANTAAAT GCTAAATTAT 360
 TTTCATTTTA AA 372

SEQ ID NO:3615

SEQUENCE LENGTH:370

45 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04267

SEQUENCE DESCRIPTION:

50 GATCTGAACT CCTTATACAT AAGAAGGTGT GTATATTAAT CCAATTATGG ACTTAAATA 60

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TTTTAAAAGT ATAAATACCC TTATTGCTG CAAAGACCAG TGTGTAGGCA TTTGCTTTTT 120
 AGCAATATTT TTAAGTGCTC CATTTTAAATG CCGAGGAATA AGTCTTTTGG CAACACAAAC 180
 TGGTCAATAA TAGGTAATGC AGGTATGTTT AGGTTAAGCC AACAATGTTT TGCATTTTTA 240
 TGCTTATTTT CTGTCAACAC TAATGAAGTC AACATTGCCT GAATGTCTGA ATAATGAAAC 300
 ACATCCCNGT TTTAAAGTAT GTAAGTAAA AAGAAATAAA AAANAAATTA AAAGGTAGGT 360
 TTTTTTTAAA 370

SEQ ID NO:3616
 SEQUENCE LENGTH:370
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04268

SEQUENCE DESCRIPTION:
 GATCCCATTA TATAGTATGT ATAGCTGAAA TCTGTAATTC AATCACTTTT TCTCTTTTAT 60
 CCTCTAACCA AAAAATTGTT TAATTTTGCA TCCCAAATGT TTTTAATCTT TGTATATTTT 120
 TNAAAAATCC NTTTCTCCTC AGCANTGCCT TTTTNGTGGT TGTAATAGA CTTACTTGCA 180
 CTTTGAAGAT GAGTTACTCC TTGTCATCTT ACAAATATGT GATATGGTAA TTNCAATAAC 240
 AGATGTCAGT TTTGANCCAA GAATTGGTGA TTTGTTTATA AGAAAAAAC TGGCTTCATT 300
 NCTGTGNAAT TGCTCTTTGG NAAATTNCTN NTTNACACGT GTAAGCCAAC CTGAGGTACC 360
 GTGATGGGTN 370

SEQ ID NO:3617
 SEQUENCE LENGTH:368
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04269

SEQUENCE DESCRIPTION:
 GATCCCTGCT CAAGCAGCAC AGAGGAAGGG GCAAGACGTG GCCTGTAGGC ACTGTNTCAG 60
 CCTGCAGAGA AGAAAGTNAG GCCGGGAGCN TGAGCCTGGG CTGGAGCNTT CTCCCCTCCC 120
 CANTTGGACT AGGGGCAGTN TTAATTTTNA AAAGGTGTGG GTCCCTGTTT CCTCTCCAG 180
 GGGTCCAAGG GAACAGGAGA GGTCACCTGGG CCTGTTTTTT CCCTCCTGAC CCTGCATCTC 240
 CCACCCCGTG TATCATAGGG AACTTTCACC TTAATATCTT TCTAAGCAAA GTGTGAATAG 300
 GATTTTNACT CCCTTTGTAC NNCNGNCTGA GGAAACGCAA ATAANAAGGG CAACATGTTT 360
 CTNTTAAA 368

SEQ ID NO:3618
 SEQUENCE LENGTH:364
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04270

SEQUENCE DESCRIPTION:
 GATCGGCCCA GCTCCTGAAC TNTGANGAGG CCATTCATAT GGCATTCCCTG GAACAAAACA 60
 CTGCACAGGT ACCAGCCTCT CCACTCCTGA CCGGGTTGGT GCTGAACAGT CAGGGATTGT 120
 NCTTGAAC TA GACTTCTGAT GCTTCTTGCA ATCTTCTTTC ATCTTTCCT GAAATACACA 180
 AAATAAACAA NTACAATAAC AAATAGTAAT TAANTGACTT TCAGGATAAC ATCTAGTTGT 240

TCAGACTTCA CCCTTCACAG GTGTGTGTGT ATGTGTGTTT ATGTCTGTAT ATTGANGCAN 300
 TTTGAATTTA TTTTACTGTA TATNTNCTGA GTAAANGACT GANATGNNCT NCTTGGGTCA 360
 GAAA 364

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SEQ ID NO:3619
 SEQUENCE LENGTH:363
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS04271

SEQUENCE DESCRIPTION:

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GATCTGAAGC CTTCCATAAA TNAGAGGCCA TTCATATGGC ATTCCTGGAA CAAAACACTG 60
 CACAGGTACC AGCCTCTCCA CTCCTGACCG GGTGGTGCT GAACAGTCAG GGATTGTTCT 120
 TGAAC TAGAC TTCTGATGCT TCTTGCAATC TTCTTTCATC TTTCCCTGAA ATACACAAAA 180
 TAAACAAATA CAATAACAAA TAGTAATTAA ATGACTTTCA GGATAACATC TAGTTGTTCA 240
 GACTTCACCC TTCACAGGTG TGTGTGTATG TGTGTTTATG TCTGTATATT GANGCAATTT 300
 GANTTTATTT ACTGGTATAT GTTCTGAGT AAAAGNCTGA AATGNNCTNC TTGGNNCNGG 360
 AAA 363

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SEQ ID NO:3620
 SEQUENCE LENGTH:361
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS04272

SEQUENCE DESCRIPTION:

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GATCCAGGAT GTACTTGGAT GAGGAGGCCCT GGCTTATCTA GGAAGTCGTG TCTGGGGTGC 60
 TTATTGCTGC TCCATACAGC TGTACGTCAG CCCCTTGGCC TTCTCTGTAG GTTCTTGGCA 120
 GCAANNNGC AGCTTTCAGT CAGTGACACA AGTAATTACT GAGTCCTAAT TTGATAGCCA 180
 CCAACTGTAC CTGGGTAGGC AAAGTCAGAT TTNAGAGGAC CTTTTCCTG ATTTGAAGTT 240
 TTAATTACCT TATTTCTNT TATGCTTNC CTCTGTCTTG TAATCNTNCT CTTCCATAAA 300
 ANCCTCCCTA TAAATTCAAT TAATTGGGT TAATTTTAGG ATAAACCCAT TTANTTCNAA 360
 A 361

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SEQ ID NO:3621
 SEQUENCE LENGTH:359
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear

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CLONE:HUMGS04273

SEQUENCE DESCRIPTION:

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GATCCAGATN CTTTCGGATG TCAGGGATAT TCACATTGAC ATGTCTNNNN AGTGTTCAG 60
 GAGATTTTAG TTTGAATAGT ACAATTTTTT CTTCTTACAA CAAAACCTAG AACGGCTTCT 120
 AACTTATTTT TTCATGGCCA AGAACTACC CTAAGTTATC TCGATAAATA TTTAGTTCTG 180
 TCTTATTTCT AATGTGTAAA ACAGGTTTTA AAAATAATAT ATAGATTTTG CATTATATAA 240
 AAAAGATTTA ATTTATAGAA CCAAACTNGA ACATATGTTT AATTAGCCT AATEAGAAGG 300
 TTACAGAAAA AGTTGCTGTA AAGATAGAAT AAAGGTATT GTACTGGTCT GTTTTTAAA 359

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SEQ ID NO:3622

SEQUENCE LENGTH:356

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04274

SEQUENCE DESCRIPTION:

GATCTACAGC AGCTGCATCG AGGACTCCCA CAGAGGTGCT ATAGGGCTGC GCATTGCACT 60
GGCCATCTCA GCTATAGCCG TCTTCCTGGT CTTGGTGTCT GNCTGTATCC TTCGATTTGG 120
CACCAGGTCT CTCTGCAACT CCATCATCTC CTTGAACACT ACAATNAGCT GTNCTGAAGC 180
CCAGAAAATT CCATGGACAC CCCCTGGAAC TGCTCTGCAG TTTTACTCCA ACCTACACAA 240
TGNTGAAACC TTTTCTTGGG TGAATTTGGT ATTGTGGTGT GTGGTCTTGG TGCTCCAGGT 300
CGTGCAGTGG AAGTCTGAAG CCACCCATA CCGGCCTCTG GAGAGGGGTG ACCCTN 356

SEQ ID NO:3623

SEQUENCE LENGTH:420

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04275

SEQUENCE DESCRIPTION:

GATCCCCCCT GNCAGACACC AAAGCTGTGA ACAGAAAGAC TGCCTGGCCA GCAAACCTTG 60
GGACATCAGC CTNGCCCAGC CTGAAAGCAT CCGNAGTGAC CTAGAGAGTT CTGATGCACA 120
GTCAGACGAT GTGCCAGACA TCACCTCANA TGAGTGTGGC TCCCCCGCT CCCATACTGC 180
AGCCTGCCCC TCGACCCCA GAGCCCAAGG TGCACCGAGC CCAAGTGGCC ATATGAACCT 240
CTCTGCCCTA GCCGAGGGAC AAAGTGTCTT GAAGCCAGAA GGTGGAGAAG CCAGAGTATG 300
AAGTGAATG AATGCTCCTG TTCTGAGANG ACACCTTGTA CTGCATCTTT TGAATTTTT 360
TTTTTTTTTT GCCCAGGGGN NAGGGTTTNT GGTTTTAAAT TTANAGGNCN TTTGGGCAAN 420

SEQ ID NO:3624

SEQUENCE LENGTH:352

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04276

SEQUENCE DESCRIPTION:

GATCAGAATT AAAGTAGTAC TATGAAATGT CCTTTTGAAT GTNAGGTCAA GAAATCCATG 60
TACAGAGTCG TGCACTTCAT TGGCTGTAAC TGTCAAATT GCCTTGATT AGAAGTTAAA 120
TCCCATCGTA AATACATCAC GAGGCCAGCT GTGTGATTTC TGAGACCTAG ATGAGAGTCC 180
NATTACTTCA AGCNTTGATT CAGTAAATNT TAAGCAGCAG AAGNCTTCGG ATGGGTGAA 240
AATCAATNTT ACAAGGTTTT AACTCATAAA CCCATNNGGG NTTTTTTTTT TCCTCTGCAA 300
NNGGTTNCTA AGGCTANTCC NTGGTAACAC TNTGGGAAAN AAATNTGGAG GN 352

SEQ ID NO:3625

SEQUENCE LENGTH:348

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04278

SEQUENCE DESCRIPTION:

GATCTCCAGT NGGCCTTTGC AGGCCCGGCC TCCTGCCTCT NGAAGGCCA NCACGGGCCC 60
 GGCCTCGGCC TCGGCCTCAC AGCAGACTCT CCACGCCAG CTAGCTCTTG CCTCACTGCG 120
 GCCTCCCCAG TCCAAAGCTC CTGCCTTTNG GCCACTTCGG CAGGTCCAGC TCCTGCCTGC 180
 CAGTGGCCTC TTTAGGCCCA GCTCATTCTT CACGTCGGCC ATTCCAGGCC CCGTTTTTCC 240
 CTTCGGGCAG CCTCTTGGCC TCTAATTTGT TTATNTTTTG TGTATAAATC CCAAAATATT 300
 GAATTTTGGA ATATTCCAC CGGGGGNGTA AATATTTTGA TAGGTAAA 348

SEQ ID NO:3626

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04279

SEQUENCE DESCRIPTION:

GATCTTTATT AAGACAGTGG AAAGTATACT ATTAAGTCAT CATAGTCTTT TGGAGACTTG 60
 TCAAANACAG CAATNAGAAA ATAAGACCTA GCATACCGTG GAGAACCATT AAAAATTNNA 120
 NANGAAACAA CAAGTATTAT GTCAACTTAC TTCAAAGGCG AGTTTTGGGA TTTNATGCAG 180
 TAAAGATTCC CTGTTTTATG ATTGTCCCTT GAAAGTCAAA TGGGGGCGCTG TCCATTGTCC 240
 TCTATTAANC TTNCAGAACT GTCACCAACA AATTGAGTT GCCTTGTCTA GGGTTCTGGG 300
 TAGTGAAGAT ATTNATNAT ATAATNAAAT ACACTGTTAG TACTTAN 347

SEQ ID NO:3627

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04280

SEQUENCE DESCRIPTION:

GATCAGAGGA GGAGTGTGAG TGTCCCTATA CTCACAGCAA AAGGAGGGAA TTCAGGAGAG 60
 GATTGAAGAA GCGGTTCCCTG TTTTAAAGGC ATTTGCAATC ATTGCTGGAG AGACAGAACC 120
 AACAGATGGG GAACAATGGC CAGGGACTCC AGGCCTGATT TAAGCCAATG CCGCCCTGTG 180
 GTCTTTACCC ACGAATGGTG TGGAAAATNA GAGCAGGGAA GAGGATTAC TCACTGGCTG 240
 TGGAGTTAGG TCAGAAGGGG GNTGGAAAGA TGGAAACCGTA TGGNTTTGGG GACATTTCTT 300
 AATCTNTAGG CTTACCTTC CTTAACTGAA ATTAAAAGCC N 341

SEQ ID NO:3628

SEQUENCE LENGTH:341

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04281

SEQUENCE DESCRIPTION:

GATCGACCTG TCATGTTTTT AAGGTTATCC AGGCTGTATA TCTCTGGAAN AGAAGGGAAT 60
 GGCAAAGAGT GGGAGTCTGA GTCAAGTTTG GTTTTGNTT NNNAAGAGAC AAGGTCTCTG 120
 TAATCCAGGC TGCAGTACAC TGGCATGNCC ATGGCTCACT ATAGACTTGG GCTCAGCCAA 180
 TCTTCCTGCC TCAGCCTCCT GAGTAGCTGG GNTTGGTTTT CCCAGGGCC ATATGTCAGC 240
 TTATTTACCC TACTCACTTG GTGTNTCCCA GNCTGCCAGC CATGCTGTTC ATCCAGTATC 300

TTCTNNATGG GGATTACCTA TTAAGGGGAC TAACACAAAA N

341

SEQ ID NO:3629

SEQUENCE LENGTH:340

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04282

SEQUENCE DESCRIPTION:

GATCATGGAA CCCCTCTTCC GGCAGTTGGC CAAATGTGTC TCCAGCCCAT ACTTCCAGGT 60
 GGCAGAGCGA GCTCTCTATT ACTGGAATAA TGAATACATC ATGAGTTTAA TCAGTGACAA 120
 CGCAGCGAAG ATTCTGCCCN NNCATGTTTC CTTCTTGTA CCGCAACTCA AAGACCCATT 180
 GGAACAAGAC AATACATGGC TTGATATACA ACGCCCTGAA GCTCTTCATG GAGATGAACC 240
 AAAAGCTATT TGATGACTGT ACACAACAGT TCAANGCAGA GAAACTAAAA GAGTTGCTAN 300
 AANTGNAAGA NCGGGNNGAN GCATGGGTTA AATTAGAAAN 340

SEQ ID NO:3630

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04284

SEQUENCE DESCRIPTION:

GATCTGCCAC ATGTNTGAGG GTTGCAGAGC CCGCTGTGGA GGTAAGATTG GAAACACATG 60
 NAGCAGAGGG AAGACATTGA AGAAAACATC TCTNCTGGAA TATTGGAAA AGAACACTCT 120
 TCTGGACCTG GTTGAAGCAG GAAAGATGGA GGCAAAGTAG TGAATAATC CAGAATTCA 180
 ATGCTTTTNA ATGTNCTTAG TGATACTGAC CTGTGATAAT ATAATTCCA GGGAGGACTG 240
 GGAACCTTAT CTCTTGAGAT ATTTGCATAA TTTATTTAAT TTAAGCCTCA TTCTCCTTTT 300
 GTNCATTTTG GTAATAAACT GGATTTGAAT TGTGAACAN 339

SEQ ID NO:3631

SEQUENCE LENGTH:339

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04285

SEQUENCE DESCRIPTION:

GATCCAGCCA GTATAGAACT AGCTCTGTAG GGGTGAGGAG GACTNTGCTA TGTATCATCC 60
 TNGATTGTNT TCCTTCAAGG AGCATTGCAC TTGCCTTCCC AGACCTTCCA CCTTAGGTTT 120
 TGCTGCAAAA AGCACCAGTG CTGAAGATGC TGCAAGACCA AATCATAGCT CATAAAATCA 180
 GGTCTGAGA TAGTTACCCA TAAAGAGGAA TCCTTTGAGT GTATGCCATT GGTGAGCCGA 240
 TGAGCATGGA CCATAGAAGG GCTCAATGTA GANTGAACT ACCCGTGTGT AAAAAGAAGN 300
 TTGGNTTAAA ATGGCTACTT TGGATGGGNA CCAGTGTCN 339

SEQ ID NO:3632

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04286

SEQUENCE DESCRIPTION:

5 GATCAGAGGG GAAACAAACG CCAAGGGGTT GGAATGGGT CGGCATCTGG AGTCTGAGAC 60
 AGCTGCCCTC CTGCGTCAAG GGCTGGGGGC CTCAGCTTCC ATCCTGTGCC AGCCTCCATG 120
 TGGACAGCTC AGCTTATTGT CCACCACCTG GAAATNCCTC GAAGCTTCAT NNGTCCAGGT 180
 CAAGAGAATC CTGTTCCCAG ACCTCTGCC AGCCAGGCCT TCCAGCTCA GGGCTGACTC 240
 CTGCACCAAG TGACGCATT TTNATACTG GTCTACCAAT GNCTCCCCTT CAAGTGAGAA 300
 10 CTACCCITTA CATTTAGGAG TGTGGCCCCG CAGTAAA 337

SEQ ID NO:3633

SEQUENCE LENGTH:337

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS04287

SEQUENCE DESCRIPTION:

20 GATCCCTGTA TGCNGCCAAG GATGGGACTT CCAGCTAATG AATTTGTACA TGCAGCCAAA 60
 TTTACAGGAA TTTTTTAAA AGGCAGAAAA ACTTGAAATA CCAACATTCT GGCAAAAAAN 120
 ANTCACTTTT ATGANGAGTA AGTGGAACTT GGGNTGCAGG ANCAAAAGAG GGAAATGTTG 180
 GGCAACATT TTNNTGGGAG CTCCTTCGC TGTGTGCAG CAGAAACAGA TTCTNAGTTC 240
 ATTTTACTC CCACTGTATT ATAGTTTANC AAAANTNGTT TATATCTTGG AAAAAANCT 300
 25 TTCTGTTTAA AAAANTTAAN CAAGTGAATG TNGGAAN 337

SEQ ID NO:3634

SEQUENCE LENGTH:390

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS04288

SEQUENCE DESCRIPTION:

35 GATCCCACTG ATTGGCCAGC CGAGCGAGAA CCAGGCTGCT GCATGGCACT GACCGCCGCT 60
 TCCAGCTTCC TCTNAGCCGC AGGGCCTGCN ACBCGGGCAA GCGTGCTGCC TCTNTNCTGT 120
 GTCGTTTTGT TGCCAAGGCA GAATGAAAAG TCCTTAACCG TGGACTCTTC CTTTATCCCC 180
 TCCTTTACCC CACATATGCA ATGACTTTNA ATTTNACTN TTGTAGTTTA ATCCTTTGTA 240
 TTACANCATG AAATATAGTT GCATATATGG ACACCGACTT GGGAGGACAG GTCCTGATTG 300
 TCCTTTCTCC AGTGACATG TTTTACTCAC ANATAANATT NTTTCAGCAA GTAAAGNGGG 360
 40 ANNGGGTTTT GGTNGNGNGG NGTGNGGTGN 390

SEQ ID NO:3635

SEQUENCE LENGTH:73

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS04289

SEQUENCE DESCRIPTION:

50 GATCTGGCCA TTTGGTACAT AATCCAGCAC AGATAAGCTG GGTGGTAATG ATAATAAAAA 60
 TGGTTTTCTC AAA 73

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SEQ ID NO:3636

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04290

SEQUENCE DESCRIPTION:

GATCACCTGG GTTCTTTTAT TTATCGACTG TGTCATGACA AGGAACTTA CAAACTGCAA 60
CGCAGAGAAA CTATTAAAGG TATTCAGAAA CGTGAAGCCA GCAATTGTTT CGCAATTCGG 120
CATTTTGAAA ACAAAATTTGC CGTGGAAGCT TTAATTTGTN CTTGAACAGT CAAGAAAAAC 180
ATTATTGAGG AAAATTAATA TCACAGCATA ACCCCACCCT TTACATTTTG TGCAGTGATT 240
ATTTTTTAAA GTCTTCTTTC ATGTAAGTAG CAAACAGGGC TTTACTATCT TTNCATCTCA 300
TTAATTCAAT TAAACCATT ACCTTAAA 328

SEQ ID NO:3637

SEQUENCE LENGTH:328

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04291

SEQUENCE DESCRIPTION:

GATCCTGTGA ACCGTTACTT TGCCTAAATC ACTTGAGACT TGAGTNTTTA ATAACAAAGC 60
ATCAATATTC ACTAAAGTCA ATCTNTTTTN ANTTTCTGTN ACTTGGCTAG AAGCTCTTGA 120
CACTAAGGGA TTAGTGTTAA TTTTCCTTGG GGGTGTTCCA CTAGGGCATT ACTGTATAAT 180
GACTTGATGT TGCCACATAG ACTTCAAGAT ATATAATATT TTNAGGATTT TNTTGATTGG 240
CCTATGTTTT ATTGCATAGT GTGAACCGTG TAAAGCTTGG TTAACCTGTA TATAGATAGC 300
TTATTGTTGA CTAGTTATAG TGTATTTN 328

SEQ ID NO:3638

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04292

SEQUENCE DESCRIPTION:

GATCCTTTCC CTGGATACAT AACCCTAGTA GATAATGTTA CTGCAAGATG TAATGNCCAA 60
ATCCAACCTA CTGCAATNT TACTATGGAA ATCTCAATGC AAAAGTAGCC TTTGTNATTT 120
TTTTTTTAAA CCGTCTCCAT AACAGANCAC TTAGAATTAT TAGCCATTTG CTGCAAAGTA 180
TTTGTTTTAA AATGTCTGGC ATATACACCA CTAACATTTA ANTGCCCAAC ATTCGGTCTA 240
TACGTGAAAA ACCTAGANGA AANGCCCTGT TGGAGTTTTG ATGTAGAGTG CAATANTACA 300
TCAATAAAGG TATTTTAAAA TGGAAG 326

SEQ ID NO:3639

SEQUENCE LENGTH:326

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04293

SEQUENCE DESCRIPTION:

EP 0 679 716 A1

GATCTGTTGT ATGTAATAAG TAACACAGAG TTTTAAAACA AATTAATTAT TTAGCTTTAT 60
 TGAAGTTTGT NTTTTNCCTT CCGAACCTGG AGTATCATAT TATAAACAGC AGTTTCACAC 120
 CAGAATAGCA GTGCCCTTNC TTTTGTACA TACTGATTGG NCCTTTCTTT ACTGTTACGT 180
 GGACACTTTC TATGTTAGTT TTGATGCATA ATTCTTTGAA TCCTTTTATA CAAACTAGAA 240
 TGTATGTGTA AGAATACCTG TCCCTGCAAT GTAGTAACTA CAAACTTATT TTTAAATAAA 300
 TAGAAAACCT GTTTTCTAA GCTAAA 326

SEQ ID NO:3640
 SEQUENCE LENGTH:325
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04294

SEQUENCE DESCRIPTION:
 GATCCAAGAG TTTAGTGATT TCAAAAGCCT TGGTCTCAGG AGAAGATTAA ACTTTCATAT 60
 TGGGCAGTGG TTCACTTTAA AACACACACA TACACACACA AAACAATTTT TTAAGAAATC 120
 CTAATAAGTA ACATACCCAA AATGCTCTGT CTTGAGTCAT GAGAACCATC AGTTCTTGAT 180
 ATTGTCTAGA CTTGCATCTA GAGCTACGTT GTAAAATTCT TTTAGGCATG TGTTAGATTT 240
 CTGTGTAAAC TTTGTTTAAA TGTAAACTTC ATACTACATT GTCAGTTTTT GTCTTAATAA 300
 AACTATAGAT TTATAATCCC TGAAA 325

SEQ ID NO:3641
 SEQUENCE LENGTH:391
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04295

SEQUENCE DESCRIPTION:
 GATCGGAATT TCCACCAATC AGCGGGAAGC CTCGGCCCTG TAACTGCTAA TGGGAGACAG 60
 CAGCGCCACG CCACAGGCTT TTCCCTGGT TTCGGGAGGG NTGGGGAGCC AGGTGGGGCT 120
 CCCGNCCAGA CCTTTCCCG AGGTCCGNCC TCTCCGCCTT NTCTNTAAAT TCCTCTTTTG 180
 AGTNCCCTCC CTTCCGGTTG AGAGGCGGGG GTTGGCCCGT AGTTGTACAC TCAGTCACCC 240
 TGAAGTGTGG AGGNGGNGGG NCTCCNTTGT GGAAGTATT GCGTGGGGAT TTGGTNTGTT 300
 TTATTAAGGG ATTTGAAAAA ATTCAGATGG ACTTNACTAG TATGGACTGT TNGGGTAAAT 360
 ATTNCGTTNC NGGGTAAATA AAATGGACAG N 391

SEQ ID NO:3642
 SEQUENCE LENGTH:324
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04296

SEQUENCE DESCRIPTION:
 GATCCAGTCA ATACATGCAG ACCAGTAAAA TCTGATTTGT GCAGAGTTCT CCATCTGACT 60
 CTCACCTTAT TCTGTAGATA TATACATATA TAAATACAAG TATGTNCTTA CGGCACAGTA 120
 TTGCTGACCT TTAGTTCGAG GTTTTGTGG TTGTTGTTA TTTTCTTCTT CTTGCAAGTG 180
 CTATCCATGT GAGTGTGTGA AGTTTCTCTA ATAAGTAAAA CACAGGCCCT TTTCTTGTG 240
 TGTTTTGTGT TAGTTTATTG TAAACAGCCA TTTGTTGTAA ATNATTATTG GCATTAAATT 300

ATAATTTATG ATTTTCAAAG CAAA

324

SEQ ID NO:3643

SEQUENCE LENGTH:323

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04297

SEQUENCE DESCRIPTION:

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15
GATCCAGTCT AGGCCCGTAT GTTGCATTTT GCTGTCATGT CTTCTTAGTC TCCATCNCAT 60
CTCAGTGGTC TTTTCTTTTC CATGACTGTG ACAGAAATGA TTTGTATCCT TCATATATCT 120
GCAGTCACAT GAAGTCTATT TGTCCCACTA CTGGTGACGT AAATTTTGGT AACTTGGTTG 180
AGGGTGGTAC CGTCTAGGTT TCTCCATATT AAGTTGCTAT TTTNCCTTGT GTATTTAATA 240
AGTATCTTAT AGGGAAATCC TTTGAGACTA TGTAAATATC ATATTACATG TATTTNGCCT 300
GTTTTCAGCAT CTTTGAAGA TAN 323

SEQ ID NO:3644

SEQUENCE LENGTH:320

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04298

SEQUENCE DESCRIPTION:

20
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GATCTGGAGC ACAAGGAACT CCCATACATT CCTAGTGGGA ATGCCTAATG TTAGAGTCTG 60
GAAGACATTT TGGAATTNC TTAACCAAGC TCTTCTTACC ATAAGATGAA GCAACTCCAC 120
ACCTTGGTAT TTACCCAAAC GAGTTGAAAG CTTATGCCCA TACAAACACC TGTACAAGAA 180
TGTCTATAGC AGCTTTATTC ATAATTGCCA AANCTTGAGG GCATCCAAGA TATCACTTAA 240
TGGGTGGACA GATAAGCTGT GGTACATCTA TACAATGGAA TATTAAGGTG CTA AAAAGAA 300
ATGAGCTCTG AAGCCACAAA 320

SEQ ID NO:3645

SEQUENCE LENGTH:319

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04299

SEQUENCE DESCRIPTION:

35
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GATCGGGATT AATATTAGTG CATTTTAAAA ACACITAAAA GTTTTACAAN TGTATTTGTG 60
TATTTCTGT TTTGGTGCCT GTTTTATAGA AGATGATTGA NGAATCACTG AAGATTAAAA 120
TAAAAAGGA ATTAGAAATG GAAAATGNAT TAGAAATGAG TAATCAAGAA ATAAAAGACA 180
AATCTGCTCA CAGTGAAAAT CCTTTAGAGA AATACATGAA AATCATCCAG CAGGAGCAAG 240
ACCAGGAGTC GGCAGATAAG AGCTCAAANN NGATGGTCCA AGAAGGCTCC CTAGTGGACA 300
CGCTGCAATC TAGTGACAN 319

SEQ ID NO:3646

SEQUENCE LENGTH:318

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04300

SEQUENCE DESCRIPTION:

5 GATCATAGAA GAAGAANCCA GTAATTGANC AAATCCTATT TAATGACATC CTTGTAGCAT 60
 AGATGGTCTA TAATGCTGAC CACAGATTTC TTAGAAATGC TGCTCTCTCT ATTTAACTAA 120
 CATTTTGTNC AGTTTTGCCT CCAGTGGAAG CAGAAAGGGT TTTTNCAGCT GTTAAATCCT 180
 AAAANTCAAT ATAATTNATT TATGTAAGAA AAATAACTCA ATCAATATAT TTTTGAACCT 240
 TTTAAGTACT AATTNNNTNT TTATCAAGTA GAAAAAAAT GTATTTGCC C TAAATCCTTA 300
 10 AAATACAAAT GCTATAAA 318

SEQ ID NO:3647

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

15 TOPOLOGY:linear

CLONE:HUMGS04302

SEQUENCE DESCRIPTION:

20 GATCCTGAGG CTTTGGCTGA AATTCTGCTT GAAACTTGTA AATCAATCAC ATATTCTTTA 60
 GAAAATAAGA CCTACTCATC TGTGAGAACA GAAGCTTTAT CTGTGATAGA ATTGCTGCTT 120
 AAAAACTTG AAGAATCTAA ACAGTGGGAA TGTTTGACAT CTGAATGCAG AGTGCTCCTA 180
 ATTGAGTCTT TAGCTACTAT GGAGCCAGAC AGCAGACCTG AACTGCAGGA GAAAGCAGCG 240
 TTACTGAAGA AAACACTTGA AAATCTGGAA TAANTTAGAN GGGGAAGAAA CAAACAAGTG 300
 25 CCATGTTCAT TGGGGGN 317

SEQ ID NO:3648

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

30 TOPOLOGY:linear

CLONE:HUMGS04303

SEQUENCE DESCRIPTION:

35 GATCCTTCTC CTTCCCTGGG ATACAGCACC TCCACCCTGC CAGGCCACCC NTGTAAAGGC 60
 AGCCAATTCA GAGCCACCTC TTATGCCTGC ATCTCCCCCA ACAATTCCTG CTGGGAAACC 120
 ACTCCTCGTA TGGTGTATC TACACCAGTG GGTTC AAGC TTGAGAAGAA TCAAGTTCTA 180
 CAGGGCTGCT TAAAACACAG GTTGCTGGGT CCTGTNTCTC AGAGTTTTTG ACTCAGTCTT 240
 GGTGAGAAT TTTCAATTCT AGAAGCTCCT GGGTAATGCT AATCCTCCTG TTCTAGGGGC 300
 40 CATAGTCATT GTCCATN 317

SEQ ID NO:3649

SEQUENCE LENGTH:317

SEQUENCE TYPE:nucleic acid

45 TOPOLOGY:linear

CLONE:HUMGS04304

SEQUENCE DESCRIPTION:

50 GATCTACAG CGGCTGGCCA CCATCTACCA CAACTNCCTC CTGGACCGTG AGAAGTCGCT 60
 CTTNTTCTAC CAGAAAGCCA GGACCTTCGC CACAGAGCTC AACGTCCGCA GGGTCAACCT 120
 GCCTCCTCTG CCACTCTGCG GGTGGGCCCC CTGGTTGGCC CCCAGCCACC CTNGCTGAGG 180
 ACAGCATCCA AGGGAGTGGG TTTTGTGCAA GGGCTAGGGG TCTCCTGCCT NTCCTGGTGT 240

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CGNCGGTGGC TCATTTTCTN GCAAATNGAG GCACGAACGC AGGGNCCAAA TAGCAATAAA 300
TGGGTTTTGT TTTTAAA 317

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SEQ ID NO:3650
SEQUENCE LENGTH:317
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS04305

SEQUENCE DESCRIPTION:

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GATCTATGCA ATTTTAAAC TAGTAATGGG CCAATTAATA TATATATAAA TATATATNTT 60
NCAACCAGCA TTTTACTACT TGTACCTTT CCCATGCTGA ATTATTTTGT TGTGATTTTG 120
TACAGANTTT TTAATGACTT TTTATAATGT GGATTTCTTA TTTTAAACC ATGCAGCTTC 180
ATCAATTTT ATACATATCA GAAANGNCG ANTTATATCT AATTATACA AAATAATTTA 240
ACTAATTTAA ACCAGCAGAA ANGTGCTTAG GAAAGTTATT GTGTTGCCTT AGCACTTCTT 300
TCCTCTCCAA TTGTAAA 317

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SEQ ID NO:3651
SEQUENCE LENGTH:316
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS04306

SEQUENCE DESCRIPTION:

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GATCTGAATT CTAAAGCGTC TTTCAATTGT TACTTTTAGG ATGAGGAAGT ACAGACAATT 60
GGTCAGATAG AACTGTGCCT CACTAAGCAA GACCAGCAGC TGCAAACTG CACCGAGCCG 120
GGGGAGCAGC CGTCCCCCAA GCAGGNNGTC TGGCTGGCAA ATGGGGCCGC CGAGAGCCGG 180
GGTCTGAGAG TCTGTGAAGA TGGCCAGTC TTCTATCCCC CACCTAAAAA GACCAAGCAT 240
TGATGCCCAA GTTTTGAAA TATTCTGTTT TAAAAAGCAA GAGAAATTCA CAACTGCAG 300
CTTCTAAAA AACAAA 316

35

SEQ ID NO:3652
SEQUENCE LENGTH:374
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear

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CLONE:HUMGS04307

SEQUENCE DESCRIPTION:

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GATCCTTGGG TTGTAAAGAG AGTAGAAACC CTAGGNAGCA GTGCTTTTGG GTCCTAGAAC 60
CTGTTGAGTT TCTAATGAAT ATTTGTAGAA TCTNATAAAA CAGTTTAAAT ACAAGCTTAA 120
GTGGCTTATG AATCCTGTNA AGCTCATTTA TGGNCTAGTG TAAACAATG TGAAGCTCTA 180
CTAAGTNCCTG TCCTTAATCA TAAATAATAG CCCCTTGNGG NCTAGCCTGT CCTCTGGTCA 240
CCTTACCAGT TGGGTTGCAC ATTGTGTGGT CGTCCAATTA AACTCAATCT TNCGTGTGNC 300
AGGNGNTAGT CTNTCCAATC ATGNCATAGN TTTCATCTGG TTTTGNCTG GTGGACGNAC 360
CTTCGGANTA ANTN 374

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SEQ ID NO:3653
SEQUENCE LENGTH:316

55

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04308

SEQUENCE DESCRIPTION:

GATCAGGACC AACCTGGAAT ATGCCAGATT TGGCTATGCT TTTTAANACA TTNATTTGGA 60
 CAGCTCACCA ACCCCTGAAG GGGCCGTAA GCCTGGTTAG TTTNTACCT ACTCCGAGTN 120
 TCCTCCCCTG CCCACCAGA TTGCTGCAGG GGC CGGTGT GCCTGGNAGC CAAATNTTG 180
 ACACTTCTTT TTTCTATGC ACTGGTTTA CACAGCTGTN ATTTTNTTT CAAAATTGCA 240
 GCAGTCCAC AAGATGTNTG CATTGGACA AATAGTACTT AAAACAAAN CAAACAAGCA 300
 CTCAGCCCAG TTCCTN 316

SEQ ID NO:3654

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04309

SEQUENCE DESCRIPTION:

GATCTAATGC AGAACTATC AGATATTGTG AAAAATCAGT GTGGGAGGTA TTCAGTCAA 60
 AGTCAGAAGG AAATGTATTA TCGTTATAAT TTCAAACCTT AAGAAAGCCT AAATTACCAA 120
 TTGCATATCA AATTTTTTG ATAATGTAAG GAAACTTAA ATCCCCTCCA TATCCTAATT 180
 GGCATTATA ATAATATGAC ACTTAACCTT GACAGCTAGA GTCTTACTTT ATGCTAATGC 240
 TAGATATCTA TTTTNAANTT CCACGTGTGT AAACATGCTA TACTCTTCTG ATATTAANCT 300
 TACTAAGTAC ATAAA 315

SEQ ID NO:3655

SEQUENCE LENGTH:315

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04310

SEQUENCE DESCRIPTION:

GATCCAAGAA GAACTAGAAA AAAAGTTGTT TGCAGGCTTG CAACCTCTCA NAAATTTTAA 60
 GGCTAGCTCT TCAACTATGT CTTNAAAAA GAATATGTCT GCCACAGCA GCCAGAAGTG 120
 ACAGCATTCT TGTGAATGTT TACATCCTGC TGCTGATAGG TTCAAGGAAT TCTTTAAACC 180
 AGATTCTGCT GACATGAGAA GCTCCAGTGA TTTGTTTTTT TGAAGGTCTG TATCAGAGCA 240
 AGCCTAACAT CTAAATAANG TTTGATTCTG GATTTTCCAG GTGGGAAATA AATAAGAAA 300
 ATTTGGCTTG TCAAA 315

SEQ ID NO:3656

SEQUENCE LENGTH:347

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04311

SEQUENCE DESCRIPTION:

GATCCGTGCC CGCNTCCAGG AGAAGTTGTC ACCTCCCTAC AGCTCCCCAC AGGAGTTTGC 60
 CCAGGATGTG GGCCGCATGT TCAAGCAATT CAACAAGTTA ACTGAGGACA AGGCAGACGT 120

EP 0 679 716 A1

GCAGTCCATC ATCGGCCTGC AGCGCTTNTT NGAGACGCGC ATGAACGAGG CCTTCGGTGA 180
 CACCAAGTTC TCTGCTGTGC TGGTGGAGCC CCCGCCGATG AGCCTGNCTG GTGCTGGCCT 240
 GANTTCCCAG GAGCTGTCTG GTGGCCCTGG TGATGGNCCC TNAGGCTGGG GGGCCCATGG 300
 5 TCAGCCCAGN NTGGGTTCTG TTCTNTGGNN CTTGTCANNC NNAANCN 347

SEQ ID NO:3657
 SEQUENCE LENGTH:313
 SEQUENCE TYPE:nucleic acid
 10 TOPOLOGY:linear
 CLONE:HUMGS04312
 SEQUENCE DESCRIPTION:
 GATCATAACT GAACCAGAAT TTGGATTATA GANGTGCACT TCCTAGCTGT TTTTATTTA 60
 15 GGTATAGGAA CACACAATGA GAACCTTATG TTTAGAATGT AGCAGTAACA ACAGAGGGTA 120
 ACTACACTGC AAGACTTAAA TGGTTTGAGC ATGTGACACT ATCCTTTTGT TGGGGGGAGC 180
 AGGGTATAAN ANTATACATA CAGGAGATTA GTTAAATAGT AAAGTTTTAT ATGTATGTTT 240
 AACTTCCATG ATATTATNA TTTNGTAGAG ACATTTGTGA TTGTNTAGAG TTCTNGTNTT 300
 20 TTTTCTATTT ATN 313

SEQ ID NO:3658
 SEQUENCE LENGTH:307
 SEQUENCE TYPE:nucleic acid
 25 TOPOLOGY:linear
 CLONE:HUMGS04313
 SEQUENCE DESCRIPTION:
 GATCTTAAAA GTGGAAAGCA GAAAAAATAC TGTTCCTGA AATTNAAAAG TTTTGGCAGT 60
 30 GCCCAGCAGG CCCTCAACAT TCTCACAGGC AAGGACTGGA AGCTGAAAGG CAGGCATGCC 120
 CTAACCCCA GGCACGTCCA TGCCTGGNTC AGAGGCTTAC CACCTGANTC AACAAGGCTC 180
 CCAGGGCTTC GTGTTGTACC TCCCCCTTT GAACAGGAGG TCTTGACAG TCTGAAACTG 240
 GACCACCCGA AGATAGCAGC CTGGCGCTGG ANGCCGGAAG ATTGGAAAGC TCTACAACAG 300
 35 TTTGTGN 307

SEQ ID NO:3659
 SEQUENCE LENGTH:306
 SEQUENCE TYPE:nucleic acid
 40 TOPOLOGY:linear
 CLONE:HUMGS04314
 SEQUENCE DESCRIPTION:
 GATCCCCAGA GAGGTGGCCC TGGACCTGGA GTCAGGAGGC GGTGTCCAGA AGAGTCGCTC 60
 45 ATCAACCCCG GGTTCAGAG TAAGAAACCA GCTGGTGGCG TGGACTTCGA TGAGACCTGA 120
 AGGTGCAGCA CAAGCGTGGC CCCGCGGGGA GTCCGCCTAT NAGGGGAGAG GCAGTCTTTG 180
 AGGCCCCCAT CAGAGACCCC CCGCCACCAC CTCCACCTGC CTGTCCTGGG CCAGGACTAA 240
 CACGGCTCCT CAAATTCCTT CCCTGTCAAA TAAACAGCTC CCTTGGTTGG AGGCTCTNGT 300
 50 GGGAAA 306

SEQ ID NO:3660

55

SEQUENCE LENGTH:371

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04315

SEQUENCE DESCRIPTION:

GATCCCCTGA GCAAGTCAGA AGTTACTCTC ATCAGTCGTT CATGGTCACA ACCTGAGGTA 60
 CTCTGCTGAG TGGGCAAGGC TGAAGAAGAG GCCTGTGGAA TGCAGCATT CCTGCTGGAC 120
 AGAGCAGGGC AGGCAGTTCT ATGCCTTGGA GCTCCTGACT GCAGGGACTC TGTCCCCACA 180
 CTCAGAAAGA CTCAGCTCAC TCAATGAGAG AATGTGATTT ACTTTATAGA ACGTATAATC 240
 AACTTTGTTG AATAATTTGT TCTATTAAGG CTGTCTAAAG TATGTNATGT CTTTCATCATA 300
 GTATGAAGTG TTGAAAATTA ATAACGGGCC TAGTTTAGGA AAAAGCTGCT TAAANGNGTG 360
 TGGCCCGTAN N 371

SEQ ID NO:3661

SEQUENCE LENGTH:304

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04316

SEQUENCE DESCRIPTION:

GATCTGTATT GATATTTGAT AGTGAAAATG TTTATTCAAT TTTTCCCAA AATGTATTTG 60
 TTCCTCTTAC TTGTTTATTC AGCTGTGGTG ACTTCAAAAT ACTTTTCCA GGTGACAAAA 120
 AAAAAGCTAG AAAAATTTT AATCTTAATT GCATTAATAC TATAAATTGA TTTGGAAGGA 180
 TTTAATTTT TATAATATNG GNNTTCCTCT GCAGTAATGT GGCATATTCT TCCNNNGTT 240
 CAAGCATTAA AAAAATCTCT TAGCAAAGCT GCACAGCCTT CTTCATAAGG GTTCTCTATA 300
 TTTN 304

SEQ ID NO:3662

SEQUENCE LENGTH:303

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04317

SEQUENCE DESCRIPTION:

GATCTGCGGT GGGCCAAGAG TATCCAGGGA GAAACCTGTC CCTGGCAGGG CTGGAGCAGG 60
 GACACTCCAG GCCCAGCTGA GGCTTCCTGC TCTGCATGGC AGGGGACATC TCTNACCTGG 120
 TCAGGACCCT GGAGGTGGGA CAGCTGGTGC TAAGGGAATG TNAGCGCATC AGGGTTGGGG 180
 AGAAGCAGTG GGTGGTCCAG GAAACCCCTG AAACAGCTGG CCCTGGGGTC CCCTTTCAAG 240
 TGTTCAGT TGTGGCAAGG GGTCAAGGAG ACCTTGCAAT GCAAATCTNT TAGAAAAAAC 300
 AAN 303

SEQ ID NO:3663

SEQUENCE LENGTH:302

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04318

SEQUENCE DESCRIPTION:

5 GATCTGAAAG ATTACATTTA GAACATTTAG TACTATTACA CTCTCAGAAA CTGTNGTAAA 60
 AAGTCACATT TTCAAACTT CATGCATATT GTATTCTTGT TGGAAATAAG TCCTATAGTT 120
 TCTTAATTGT CITCATGCCG TCCATATTTA ACAAACATTG CAAGTCCTTT TTATATTGG 180
 GTAATNATTT GTAATTTAGT GAAGGAGACT AGGGGATGTT TTCTTCCAAA GGGAAATTAA 240
 AATCAATTTT ATGGTATTTT GAAAGTAAAA TACTCCTTAA CGTGTCAATA TTTTAAAAAT 300
 GN 302

10 SEQ ID NO:3664
 SEQUENCE LENGTH:301
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04319

15 SEQUENCE DESCRIPTION:
 GATCCTCTCA GAGTGCCAGG CATCCCCCCC GNACCAGCAG AGGCTCATCT TTATNAGGCA 60
 AGCAGCTGGA AGATGGCCGC ACTCTTTNTG ACTACAACAT CCAGAAAGAG TCGACCCTGC 120
 ACCTGGTCCT GCGCCTGAGG GGTGGCTGTT AATTNTTCAG TCATGGCATT CGCAGTGCCC 180
 20 AGTGATGGCA TTACTCTGCA CTATAGCCAT TTGCCCCAAC TTAAGTTTAG AAATTACANG 240
 TTTAGTAAT AGCTGNACCT GTTCAAANTG TTTAATAAAN GGTTCGGTT GCATGGGTAA 300
 A 301

25 SEQ ID NO:3665
 SEQUENCE LENGTH:300
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04320

30 SEQUENCE DESCRIPTION:
 GATCTGAAAA ATGAAGTTTG GTATCAAAAA NGTCATGACC CTGTATGTAA AGCAGAAAAC 60
 TTCAAATCTG ACTGTTTCCC ATTACCTGCT GAAGTATGTC TCCTGTTTCT TTTCAAAGAG 120
 GAAGANGAGT TTACAACAGA TGANGCAGAT GAAACTAGGA GCAATGAAAC CCAGAATCCT 180
 35 CATAAACCAT CACCTAGCAG GCTGTCAACA GGTGCATCTN CTGATGCTGT CTGGGNTAAT 240
 GGCATTGATG ATGCTTATTT TTTAGAAGCT ACTGAAGATG CTGAATTAGC TGAAGCTGCN 300

40 SEQ ID NO:3666
 SEQUENCE LENGTH:300
 SEQUENCE TYPE:nucleic acid
 TOPOLOGY:linear
 CLONE:HUMGS04321

45 SEQUENCE DESCRIPTION:
 GATCACTNAA TGGTCAAGTG GAACAAGCAC TACACGACTA ACCCCTATTG GGGTTTTTAA 60
 CTTAAGGGAG GCTAATTTTT AATTTAACT GCTCGAGATA TGAGTTCTGC AAAAGGTGGT 120
 CCGCATCCTT GGCCCTCTGG ACATTATCAC TAAATTGCTT GTGCCTGTTA ACAAGAATAC 180
 TGACCAGAAAT GCTCTTCATG TAGCTTATAC AGTTGGTTCA CTTCATGCGG TTCTTGACAT 240
 50 GTTTATTTCT ACCCTTAATG CAATGAAATG TTTCAATTAAT AAAAAACAC TTTATATAAA 300

55 SEQ ID NO:3667

SEQUENCE LENGTH:417

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04322

SEQUENCE DESCRIPTION:

GATCTTTCTG GCTCCACTCA GTGTCTAAGG CACCCTGCTT CCTTTGCTTG CATCCACAG 60
ACTATTTCCC TCATCCTATT TACTGCAGCA AATCTCTCCT TAGTTGATGA GACTGTGTTT 120
ATCTCCCTTT AAAACCCTAC CTATCCTGAA TGGTCTGTCA TTGTCTGCCT TTAAAAATCCT 180
TCCTCTTTCT TCCTCCTCTA TTCTCTAAAT AATGATGGGG CTAAGTTATA CCCAAAGCTC 240
ACTTTACAAA ATATTTCCCTC AGTACTTTGC AGAAAACACC AAACAAAAAT GCCATTTTAA 300
AAAAGGTGTA TTTTTCCTT TAGAATGTAA GTCCTCANG AGCAGGGACA ATGTTTTCTG 360
TATGTTCTAT TGTGCCTAGT AACTGTAAA TGCTCAATAA ATATTGATGA TGGGAAA 417

SEQ ID NO:3668

SEQUENCE LENGTH:298

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04323

SEQUENCE DESCRIPTION:

GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGGGG AAAGAGGCTT TGCTTTGCGC 60
ATATCAGGCT TAGGACTGTG GGAGGCTTAA GAAGCAGATG CTTCTTTNAT TGTACTCTTG 120
TNCTGCCCTT GTTTTTTGAA GGCTCTGACT TATAACTNCT GTATCAGAAG AAACATTTTG 180
ACAGTGCTT GGTGGAGAT GAACATCCCT AATTGACATG TGATGACTAT TTCTNATTCC 240
ATTCATCTAA GAGTCATTGA AATTTTGTGTT TGCTTGTGTT TTTAGCTTCA AGGTCTTN 298

SEQ ID NO:3669

SEQUENCE LENGTH:294

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04324

SEQUENCE DESCRIPTION:

GATCATCTCT ATATCTAATT TGTATTATNA CTAATCTTAT TCCAACCTATT TNCTTTATNA 60
TACTGAAACA GTTTGTNCCT TCAGTCTCTG CTTGGGCTAC CTAAGGGA AGGGCCCCCT 120
ATCCTGTAAT CACATGACTT ACTTCACCTT GTCAATCACT GAGAAGATTC ACCCTCCTTA 180
CCCTGCCCCC TTGTCTTGTA TGCAATAAAT ACCAGTGGGC CTAGCCCTCT GGGACCACTA 240
CCGGTCCCGG GGTCTTGATG GTAGTGNCC CANAGCCCAG CTTGCNTNCN CAAA 294

SEQ ID NO:3670

SEQUENCE LENGTH:293

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04325

SEQUENCE DESCRIPTION:

GATCAAGAGG CCACCAGTTG TACTTCAGCA CCAATGTGTC TTACTTTATA GAAATGTTGT 60
TAATGTATTA ATGATGTTAT TAAATACTGT NCAAGAAGAA CAAAGTTTAT GCAGCTACTG 120

TCCAAACTCA AAGTGGCAGC CAGTTGGTTT TGATAGGTTG CCTTTTGGAG ATTTCTATTA 180
 CTGCCCTTTNN NTNCTNACTG TTTTATTACA AACITACAAA AATATGTATA ACCCTGTTTT 240
 ATACAANCTN GTTTCGTAAT AAAACTTNTC CCTTTTTTTA AAATGNAANT AAA 293

SEQ ID NO:3671

SEQUENCE LENGTH:292

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04326

SEQUENCE DESCRIPTION:

GATCTATAGT ATTTTAATGT GCATCTACTT TAAATNAGTC ATCTTGGGGT TTNATAATT 60
 CCCTTATGTT CTGCCCCCTC TACACTTGAA ATAACAAAAT GCCTTAATTT TATGGATTAG 120
 TTCTCTTATA GTAGACAGGC AGCTATATGC AGCAAAACCA ATAAAGTTAT TTTTCAACTT 180
 TCATAGTTGT AAAATATCTT ATAACAGAAT ACAAAACAGC TANGAAAACA TGCCACATT 240
 NATTTTNGCA TTTTCAAATA ATTNGTTTTT GGTGTAAGCA CAGGATAAAA AN 292

SEQ ID NO:3672

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04327

SEQUENCE DESCRIPTION:

GATCAAGGAT GCAACCTCAG GTTGAGAAAG AAACAGGGTT CCCTGGGCCC ATTAGACTGT 60
 TTGCAGGGCA TCACTGCTTC CCCCTGACAC CTCACAATA GCAAAAATTG TCTTTGTCTT 120
 TGGAAATNAT AGAGGGATTT GGGTATCCAG ATTGTGCAGA TGCAAACTTA GGCTGTCTTG 180
 ATGNNNACTT AGAACCACAG AAATGCTTTT AAAATGCCTG TTTTAAGATG GAATTGTTGT 240
 TTNATAATT TGATTTTAGT GCTAAATAAA TGATTGGCTT TGTACATGAA A 291

SEQ ID NO:3673

SEQUENCE LENGTH:291

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04328

SEQUENCE DESCRIPTION:

GATCTAAAGG CTCTGGNTTT GCCTTCTTTC AGTCTGACAC TGACTAACAA CCTCGACAAG 60
 GTGGGCATAT ACCTGGATTA TGAAGGAGGA CAGTTGTCCT TCTACAATGC TAAAACCATG 120
 ACTCACATTT ACACCTTCAG TAACACTTTC ATGGAGAAAC TTTATCCCTA CTTCTGCCCC 180
 TGCCTTAATG ATGGTGGAGA GAATAAGAA CCATTGCACA TCTTACATCC ACAGTAATGA 240
 GTCATAATAT TATACAAATT CAGAGTGTTA TTAAAGAGGT TTTGAAATAA A 291

SEQ ID NO:3674

SEQUENCE LENGTH:290

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04329

EP 0 679 716 A1

SEQUENCE DESCRIPTION:

GATCCCCAAA GCTGTTTNA GGTATAAGGA CAAGGAGAGG AGACAAGTGA CGACAGCCAT 60
 TCCCCTTTGC AGCTATCTAC TGTAGTGACA GCCATTTCTT GGTGATGGG TTGGAAGTCA 120
 TCAGAGGTTT GAAGAATTAC ACTGGCCTTT GTTTTCNNG AAATGCCGAC CATGGAGATG 180
 CTTTAGAGTC TTCTCAAATA GCTTAGATGT TGAATGNGG TTAAGCTTTG CTTCAATAAA 240
 CAGGGGCCCT CAGAAGTTCT CCTTTAAATT TTTCANATAA AAAATTTAAA 290

SEQ ID NO:3675

SEQUENCE LENGTH:288

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04330

SEQUENCE DESCRIPTION:

GATCTATCCC TGTCTCACTG AAAGCCCCTG TGTAGTGTCT GTGTTGTTTT CCCTTGACCC 60
 TGGNNTTCC TATCCTCCA AAGACTCAGC TCCCCTGTTA GATNGCTCTG CCTGTCCTTC 120
 CCCAGTCACC AGGGTGGGGG GGACAGGGNN AGCTGAGTGC ATTCATTTTG TGCTTTTCTT 180
 GTGGGCTTTC TGCTTAGTCT GAAAGGTGTG TGGCATTTCAT GGCAATCCTG TAACTTCAAC 240
 ATAGATTTTT TTTGTGTGTG TGGAAATAAA TCTGCAATTG GAAACAAA 288

SEQ ID NO:3676

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04331

SEQUENCE DESCRIPTION:

GATCAACCCC TGACCTAATC GGTATGTGA TCTACAGATT ACAGACATTG TATAGAAATG 60
 CACTGTGAAA ATCCCTATCC TGTTTTGTTT TAATCTAACT ACCGGTGCAT GCAGCCCCCA 120
 GTCATGTACC CCCTGCTTGC TCAATCAATC ATGACCCTCT CACACACATC CCCTTAGAGT 180
 TGTGAACCTT TAAAAGGGAC AGGAATTGCT CACTGGGGA GCTCAGCTCT TGAGACAGGA 240
 GTCTTGCCAA TGCCCCTGGC TGAATAAACC CCTTCCTTCT TTAAA 285

SEQ ID NO:3677

SEQUENCE LENGTH:285

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04332

SEQUENCE DESCRIPTION:

GATCACAAAA ATGGAACCCC CTGTTTCATG CTTCTACAGT CCAGCCAGCC AATCTGAAGA 60
 TGTCATTCTT ATAAAAAGT ATGACCAAT GGCTATCTNC CACTGTTTAT NTTGGCCTTC 120
 ACTGACTCTG CTAGGTGGTG CCCTGATTGT TGGCATGGTG AGATTAACAC AACACCTGTC 180
 CTTACTGTGT GAAAAATATA GCACTGTAGT CAGAGATGAG GTAGGTGGAA AAGTACCTCA 240
 TATAGAGCAG CATCAGTTCA AACTGTGCAT TATGAGGAGG AGCAN 285

SEQ ID NO:3678

SEQUENCE LENGTH:282

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04333

SEQUENCE DESCRIPTION:

GATCTCTGTG TTTGCAGTCA AAGGGCGGCT CACACATGGT CAAGTATTAT AAATNTCCTG 60
TGTATCTNAC AATGGAATCT ATTCTACAAT TTTAAGTATA CGCTTCTGT ATATGGCCAT 120
TAAGTGAAGC TTAATAATCT TGTNTTNCT GTCCTCATAG ATATTTTAAT CTGTGGCATC 180
CTCCTGTAAT CTCAGCATTT TGGGAGGCTG AAGATGAGAG GGTGCTTGA GGCCAGGAGT 240
TCAAGACAAA CCTAGGCAAC ATAGCAACCC TGTCTCTCCA AA 282

SEQ ID NO:3679

SEQUENCE LENGTH:280

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04334

SEQUENCE DESCRIPTION:

GATCTGAGGT GATATGTTCT GAATGTAAGC ACCGTCAACA TCAGACACCT ACTCATGGAC 60
ATGTGGTTGC CGGATTTTCT TAAGATGTTT CCAGAAATGA CTGATATTTT ATATTTATAC 120
ATTTTAGATG ACAAAGCTTG ATATTTATTG CTGTCGCACA TTTTAAAGTT TTCITTTTGG 180
GTTGCTCTGT GNCANGGCGT GGTACATGG TGNTAAATCG GTACCTGATA ATGTACCCAA 240
ATACTATGGC CAGATAATAA ATTGNGGTGC AAACAACAAA 280

SEQ ID NO:3680

SEQUENCE LENGTH:278

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04335

SEQUENCE DESCRIPTION:

GATCACTGTG CAGTGGGACC ACCCTCACTG GCCTTCTGCA GCAGGGTTCT GGGATGTTTT 60
CAGTGGTCAA AATACTCTGT TTAGAGCAAG GGCTCAGAAC NCNNAATAC TGTCATGGAG 120
GTGCTGAACA CAGGGNNGGT CTGGTACATA TTGGAAATTA TGAGCAGAAC AAATACTCAA 180
CTAAATGCAC AAAGTATAAA GTGTAGCCAT GTCTAGACAC CATGTTGTAT CAGAATAATT 240
TTGTGCCAA TAAATGACAT CAGAATTTTA AACATAAA 278

SEQ ID NO:3681

SEQUENCE LENGTH:277

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04336

SEQUENCE DESCRIPTION:

GATCANAGAN TNACAACTGT TCATTATAGT GGTGCCTTAG GCAATCTTN CAAAGTAAAT 60
TCAGGGCCCC ATTGCTACTT ATGCCATATT TGGACATACT TTTTTTTCT TCAATTTTGT 120
AAACTTCCTG GAAAGCTGTC TTCCTAAGT ATCCCNAGT CTCTATCTAT GNGGNTAGTA 180
GTCATGGAAT TAACACATAA AGTACGCCAG NAGTTNGNTG GAACGTGTTA GAAACTGTTT 240
TGTGCTTNA TGGATGTCAT ACTTGNCANT ACATGTN 277

SEQ ID NO:3682

SEQUENCE LENGTH:275

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04337

SEQUENCE DESCRIPTION:

GATCTTCTT TACTTGATGT GTCCTTCTNT TCGCAGATTG ATAACAGAGC TGTGCTAGAA 60
 CTGAATGCAA GCTTCCAAA ANTNTTCATA AAAANAGCT TTACTCAGTG ACTTAATATA 120
 TGTNCTGTAT TAAAATTAAT GTGCTTTGTT GGGGTTTAAT TTTGGNATTG GTTTTGGGTT 180
 TTNTTTT TAG TTGTTTAAAT GGTAAGAATT AAGACATTTT NTAGATTTTA AAGAAAAATA 240
 TGAAATTNTC CATTAAATCA AGTAAAAATG TGAAA 275

SEQ ID NO:3683

SEQUENCE LENGTH:269

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04339

SEQUENCE DESCRIPTION:

GATCTCCGCA GTCTTCAGCG CATTGGCCCG AAGAAGGCC AGCTAATCGT GGGCTGGCGG 60
 GAGCTCCACG GCCCCTTCAG CCAGGTGGAG GACCTGGAAC GCGTGGAGGG CATAACGGGN 120
 ANACAGATGG AGTCCTTCCT GAAGGCAAAC ATCCTGGGTC TCGCCGNCGG CCAGCGCTGT 180
 GCGGNCTCCT GACCGTCGTC TCCTCACTCC GNCTTTTCAA ATTTTGTAT AACCCCGTGT 240
 TGTGTAAATA CAGTTTTTGC TCCGGTAAA 269

SEQ ID NO:3684

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04340

SEQUENCE DESCRIPTION:

GATCAGGCCA GTAGGTTGTG AATGCAGGCT GGAGCCCCCG AATGCCCCAN NCACACTGCA 60
 GCATTGACCA GACCATCCGA AACCTGCGTC CCTGGTGATG TTCTCAAGCC TCGGAAGTGG 120
 CAAATGGAAA TAATATGGCC GGTTCGGTGT GTAGGAGAGT TGTGACTTAG GCAGGAGTCG 180
 ACCTCCTCAA GTAATGGAAC GATTCAAAG GCAGGCTGCC CTGACCAAAA ATATCTGCCA 240
 TGAATAAAGG TGCCTGAAAT CCTAAA 266

SEQ ID NO:3685

SEQUENCE LENGTH:266

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04341

SEQUENCE DESCRIPTION:

GATCTACTTT CAGGATTATT TTTGTNTTT GAACGTGACA GTNTGGATGA GGCAAGTNAG 60
 TTAGATGCT GCGACCCTGC GAGAAGCAAT AGCTAGTGAA CACATTAGCT CCCTACATGG 120

GACGCAGCTC CCTCTGACAT GTGTCTCTGC CCTTAACCAA GACAGAAAGG GGGTAAATGG 180
AGGATTGGNT TACTGTCTTT GCTGGTTAGT TTTGTGAAAT TTAAAAATG TTCAACTTTT 240
GANTAACTC CTTTAACTT CTTAAA 266

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SEQ ID NO:3686
SEQUENCE LENGTH:270
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04342

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SEQUENCE DESCRIPTION:
GATCTCCTTC AGTNGTCTAC CCACTTCCGT CATTGTCCTC CGCTAGAATA ACAGAGTAGT 60
TGGTAGTCAT GGCCAGAAGG GGGGTGGGG CAGTGTGAGG ACTTGGGGTT TCTGTGCTGT 120
GTGACACAAG GAGATAAGTG ACAATNTTGA AGTCCTAACT TGCCTATTG TAGAAAGTAT 180
AGTGGTGATT TTTGTGCAA GATTTGAAGT TTTAAAAAAG TACCAAGTTC CTGAAATTCA 240
ATAAAATATT TTTATTAATT TTAATGGAAA 270

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SEQ ID NO:3687
SEQUENCE LENGTH:264
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04343

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SEQUENCE DESCRIPTION:
GATCTCAGCT CACTGCAACC TTCACCTCCC GGGAGCATGC TGCTCTATCT TTTTTTNCAG 60
ATGTTTGAGC TATCCAGGT TTTTGGGAT TTCTGTGNT TTGTTTGTG TTTTGCTTTT 120
CTACATAATT GTTTGGATAA TCTTGTGAGT ATCTACGAAG TGCCTTGATA GTAAATATAT 180
NAACCTGTG TATCAATNTG GGGTAATTNC ACATNTTTT CTATGTTGAG TTATCAATAA 240
ATTGATATTG TATATGNCTC TAAA 264

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SEQ ID NO:3688
SEQUENCE LENGTH:262
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04344

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SEQUENCE DESCRIPTION:
GATCCTCAGT GCAAAATGTC TTGTGTANTT NTNTGTGAAT CCATGGGTCT GGCTAGAGGG 60
CCCAAAGCTT GTAAATATGG GGATAGTCTG GGTCAGACCC ATCTNTCCCT TACCCATCTT 120
GCTTCCAAGA CCATTTGTAG TGAGCGAGTG GATGCTGTGC TACGTGTGAA ATCTGTCTTT 180
GCGGGGCCTG TCTCAGTGAT TCGNTTTTGG TATTNGTTTG TAGCTTTCCT GGAAGTCAAA 240
TAAATGTTTC CCCCACTCCA AA 262

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SEQ ID NO:3689
SEQUENCE LENGTH:256
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04345

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SEQUENCE DESCRIPTION:

GATCTCAAAT GTGAACAGTT TACTAATGCA CTAAGAAGT TTAAATCTGT GGCACAATCA 60
 ATGTAAGCAT GGGGTTTGT TCTGTAAATT GATTCTAAT NTGAAATTAC TGAACAACATC 120
 CTATTCCTCAT TTTNGCTAAN CTCAATTTCT GGTTTTGGTA TATATCCATT CCAGCTTAAT 180
 GCCTCTAATT TTAATGCCAA CAAAATTGGT TGTAATCANA TTTTAAATA ATAATAATTN 240
 GGCCCCCCT TTAAA 256

SEQ ID NO:3690

SEQUENCE LENGTH:251

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04346

SEQUENCE DESCRIPTION:

GATCTAAAAA GCTGAATAGC ATGTNAGTTA CTGGTTTCA ACTTGAGTTT NCTTTTAATG 60
 TTAATAAGAT TGAACTTTA GTATTTAGTG GGAATGGAA AGAGTTGCC TGTGCAAG 120
 TAATGAAGCC TGATTGATT ATGAAGCTGC TTAATCACTC TTCATGTGT CAGAATTACT 180
 GTTTTNTTG TTTGTTTNC CTTTNGTCA CTGTGTACA TTAATAATT NGGAAGATG 240
 CTTTACCTAA A 251

SEQ ID NO:3691

SEQUENCE LENGTH:250

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04347

SEQUENCE DESCRIPTION:

GATCCAGAC CTGTNGTCTC TCCCACCCC TCCCCAAAGC CACTGGAAGG AGCACATACT 60
 ACCTAGAAGT AAGANGNNGA GCCTCAGAAG AAAACAAAGT TCTATTTAT TAATTCCTA 120
 TGTGTTGTGT TTGTAGCTT GTCTTAGCTC TGGACGTGAA ATACTTCGAT GATGATGATG 180
 ATGATGATGA TGATAATAAT AATAATAATA ACAACAACAA CAACAATAAT AAAGATGTGA 240
 AACTCGAAA 250

SEQ ID NO:3692

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04348

SEQUENCE DESCRIPTION:

GATCTCAGAT AACTCAGTAC AGATAGCAAT TAGTCAGCTG ATTTGATTAC AATGGAGTAA 60
 CCGACAATAT ATTTATTTAT AAAGCACATA TTCATAATA CGAGAAGAAT TCAGAAAACC 120
 ACTTAAGCAA GACCCTTCTG AAATAAANN TGTNGCTTTT TAAATAGTTT GTCCTAAGGT 180
 GTTTAAANCA TGTCAACCTT ATGTAAGGNN AANTTCCTG GTCCAANTAA NGTTGANGTT 240
 TAAGGAAA 248

SEQ ID NO:3693

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04349

SEQUENCE DESCRIPTION:

GATCCTGGTT GGAAGGATGG GGAAGGCTTC AAGGGGCTTT GGAAGAGCTC TTCTAGCCCT 60
 TTATAAAAGG AGGGCAGCAG CTGAGACTGA TGAGAGGAGG GCAGCCTGCT CTGTTCTTTC 120
 AGGGCCCCCC ACCCCCATCT CCCCTACCCT AGCCCAACCCT AGGGCCTCTA CCCAGCGGGA 180
 GGGGTTGAAG ACCAGGCCTG GTTTTATTAG AATTCATTTT GTAATAAAAG CCTTTTTTAG 240
 TGGTGAAA 248

SEQ ID NO:3694

SEQUENCE LENGTH:248

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04351

SEQUENCE DESCRIPTION:

GATCCTATTT TNATGAAATG TCCAGAACAG GCAAATCCAC AGAGACAGAA ACTAGACGAA 60
 TGGTTGCCTG AGGGTGAGGG GAAACAGGGA GTGACTGATG ATGGGTTTTG TGTGGGGGCA 120
 ATAGAATGTN CTAAATTTG ATAGTAATGG TTATACAACCT CTGAATATAC TAAAAGCCAT 180
 TGTACACACG TTAATAAGGG TGGATTGTAT GTGAATTCTA TCTCAATAAA GCTGTTCAAA 240
 AATTCAAA 248

SEQ ID NO:3695

SEQUENCE LENGTH:245

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04352

SEQUENCE DESCRIPTION:

GATCCACTCC GCCATCGATG CATCCCAGAC CCCCAGTGTC GTGTTGCGAA GCATCCTAGC 60
 AGCCTTCTCC AAAGCCACAT GTAAAGACTT GGTATGTTT ATCTAATGTT GGGTCCAAGA 120
 AGGAATTTCT TTCCATCCCT GTNAGGCAAT GGGTGGAAT NATAGGACAG GCAAAGAGAA 180
 GCTTCCTCAG GCTAGCAAAA ATATCATTN ATGTATTGAT TAAAAAGCA CTTGCTTGAT 240
 GTAAA 245

SEQ ID NO:3696

SEQUENCE LENGTH:243

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04353

SEQUENCE DESCRIPTION:

GATCTCAAAA CCACTATTTT TATTATTICA TTATTTTICA GAGGCCTTAA AATTCTGGAT 60
 AAGAGAATGG AGGAAAATAC TCANCGGTAC TTCATTATTT NATTCCTTT TATTAAAAAA 120
 TTACTTCTAT GTTTTNNATTG TCTCTTGAGC CTTAGTTAAG AGTAGGTAG AAATGCATGA 180
 NCTTCATCCT AATAAGGATA AANCTTAAGG AAAACCACAA TAAACCATGA AGGTGTACAC 240
 AAA 243

SEQ ID NO:3697

SEQUENCE LENGTH:241

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04354

SEQUENCE DESCRIPTION:

GATCTNTCCA CGGTAGCACT TGNCTTTTC GACGCTTAAC CTTTCCGCTG TCGCCCCAGG 60
 CCTCCCTGA CTCCCTGTGG GGGTGGCCAT CCTGGGCCC CTCCACGCCT CCTGGCCAGA 120
 CGCTGCCGCT GCCGNTGCAC CACGGCGTTT TTTTACAACA TTCAACTTTA GTATTTTAC 180
 TATTATAATA TAATATGGAA CCTTCCCTCC AAATNTTCA NGTAAAAGGT GGCTTTTCAA 240
 A 241

SEQ ID NO:3698

SEQUENCE LENGTH:239

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04355

SEQUENCE DESCRIPTION:

GATCAGCACT GCACTNTTAG CTGAGAGTGC GGGCAAGACA TAAACTGTCC AGAGTTTNA 60
 GNTTCTNGGA AAGACCGGAG GGCTTCTCCC CACAGAAGGC GGAGAGAGCT GGGNCTCAGA 120
 CATGGNTGTG CACCTTAATA AACCTGTCTG TCTGCCTCCC TGACTCTGCT TCTNNGGAGC 180
 ATGGTGAGCA GCCCTNGTGC TCANCAGCCA TACCTATGGG ACACACACTA CGNAAAGGN 239

SEQ ID NO:3699

SEQUENCE LENGTH:236

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04356

SEQUENCE DESCRIPTION:

GATCACAGGT GATTACACG TACACACATA AACACACCCA CCAGTGCAGC CTGAAGTAAC 60
 TCCCACAGAA ACCATCATCG TCTTTGTACA TCGTATGTAC AATGCAATCA TTTCATACTT 120
 TAAACTGGTC AAAAAACTAA TTGTGATTTT TAGTCTTGCA AAGCTGTATG TAGTTAGATG 180
 ATGTGACAAC CNCTAATATT TATCTAATAA ATATGTATTC AGATGAAACC TGTA 236

SEQ ID NO:3700

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04357

SEQUENCE DESCRIPTION:

GATCCATCCT TTATCAGGAA GTCTGAAGCG ACTATAAAGG TTTTNTANTT CAGATTTAAA 60
 AACCAACTTA TAAAGCATTG CAACAAGGTT ACCTCTATTT TCCCACAAGC GTCTCGGGAT 120
 TGTNTTTGAC TTGTGTCTGT CCAAGANCTT TTCCCCCAA AATGTGTATA GTTATTGGTT 180
 AAAATGACTG TTTTCTCTCT CTATGGAAT AAAAAGGAAG AAAAAAAGG GNA 235

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SEQ ID NO:3701

SEQUENCE LENGTH:232

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04358

SEQUENCE DESCRIPTION:

GATCCGTGTT CTCCATTAT TAATGCATTG TAGACCAATT TAACTGCTGT GTTTCAGGAA 60
AATTCCTCCT AGTTTAATAA GCAAGCTAAA AGTTTTATTT TTTATATTTA GTGCTTAATC 120
TTTGCCTCAT GTTATGTAAA ATTAGCCTGC AGATATTTTC TCTCAATTCT GTAGACTCTC 180
GCAAGATAAA CATTCAAACA GTGAAACAAA CANTAAAATA AATAAACCTA AA 232

SEQ ID NO:3702

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04359

SEQUENCE DESCRIPTION:

GATCCATCTG AACTATGAAG TGAGTACCTG GAGGAACTCC TACATTTAAG GCTTTCAAAG 60
GTTACAGGCT TTTCGTGTGT GTGTGTGTGT GTGTGTGTGT GTGCGTTTTG AGAAAAATGG 120
AATTCAAACA CTGTNNTTAG AATGTATGTT TACTTATATA GAATTAATGA ATNTATATAA 180
TAATAATNAC TGTATATAAT TNTAAAAATAT AATAAAGTCT CTTTATCCAA A 231

SEQ ID NO:3703

SEQUENCE LENGTH:237

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04360

SEQUENCE DESCRIPTION:

GATCTGGAGT TGAGAGCCAT GGGTTTGGAC ATGACTGGCA CAAACAGCTG TCATATGTTC 60
ATGGTCAGAT GTCATACATT CTCAGCTGTC TTGTTCCACC AGTATTTACC AGGAAAACAA 120
AGAATGTGTT AAGGGATGCT CCCCCACCCC ACATCTTAAG TCAGTGTGCC AAGTACTGAG 180
ATGATTTTAG GGACATTTTA TTTTAAATTA AATTTACAAT CTAATGGTAA ATTGAAA 237

SEQ ID NO:3704

SEQUENCE LENGTH:231

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04361

SEQUENCE DESCRIPTION:

GATCATCAAC AAGATTTCTT TGTGCAAAAT ATTGACTAT NCTGTATCTT TNATCCTTGA 60
CTAAATTCGT GATTTTAAAG CAGCATCTTC TGGTTTAAAC TTGTTTGCTG TGAACAATTG 120
TCGAAAAGAG TCTTCCAATT AATGCNNNT TTATATCTAG GCTACCTGTT GGTTAGATTC 180
AAGGCCCGGA GCTGTTACCA TTCACAATAA AAGCTTAAAC ACATTGTCAA A 231

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SEQ ID NO:3705
SEQUENCE LENGTH:229
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04362
SEQUENCE DESCRIPTION:
GATCAAAATT GAACCATGT ACAGTTTGGN TTCTGTTTGC TTCAAAATAT GTAGAATTGT 60
GGTTGATGAT TAATTTGCGA GACTAACTTT GAGAGTGTA CANTTTTGAN GAAAACATTG 120
AATGTTTTGC AAATGAAGGG GCTTCACGGA ATGTTACANT GNTACTAATA TAATTTGGGCT 180
TTNNTNATGC AAATNGTTAA CACCAGCTAT TAAAATATAT TTNGTAAA 229

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SEQ ID NO:3706
SEQUENCE LENGTH:228
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04363
SEQUENCE DESCRIPTION:
GATCGCTACC CACCTTCCTT CCATGGTTCC CACCCTCCAC GTTATTTTCC CTTTCTGCAG 60
CGGTTGCACT ACAGGTAGCT ACTGTGTATT ATGGACAAAT GAGAAATGAA TTCITTTTCT 120
GGCTGTCCAT CTATTTTATT TCAAATAAGG AAAAGTGTAT TTGGATTTTG TGTAATACA 180
TCTAGTGATG NCATTTTTC AATGTTTTNA AAAACCGTGT ACAGTAAA 228

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SEQ ID NO:3707
SEQUENCE LENGTH:228
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04364
SEQUENCE DESCRIPTION:
GATCCTCATC CAATTGGTGT TTTTCAGAAG TTTTCCAATA TTATGAATTC TGTGTTGTGG 60
AGAAAAGCAA CCATGCATT ACTGGTCAAT GCCTTCTTGT ATATGTAATT CAATACTTTT 120
ACTTTTAATA TCCTCACCTT ATCTAATCTT TGATTTTGT CATGTAATTT ATTGCTTCAT 180
TAAGGTACT TTTTGTATA CAAAATAAAA GCTGATATCC AAGGCAAA 228

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SEQ ID NO:3708
SEQUENCE LENGTH:226
SEQUENCE TYPE:nucleic acid
TOPOLOGY:linear
CLONE:HUMGS04365
SEQUENCE DESCRIPTION:
GATCTATGAA AATNTGTTTT GACCAAACCTT AGTATTAGGC AGGTACACAG ATAAGATTTT 60
CCATTCTNAA CATTCTCACT GTAATGCAG ACATTGANG CACCTGNATG TGCTATCAAT 120
CAGGTGGGAA ATTTAGCATT ATATATTGGA AGCATTGAGA AACATTGGTC TNTCATTCT 180
ATTNNTTTT NCCCCTCCTN TCCTCCTCCT GCCCCACANT ATATNN 226

SEQ ID NO:3709

SEQUENCE LENGTH:224

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04366

SEQUENCE DESCRIPTION:

GATCCTGAGA GCTTTGAGAG GGTGTTGCCA GTTTTAAGCT GAGATGGCCC ATTTGGAGCC 60
 TTACAGAACT AGACCAGAAG ACATTTGTGG ATAAATCTGA ACTCACTTCC TGTGTGTAAC 120
 TTCTAACTTC ACTGGTTCCT CCCATCTGAA TTGGCCACAT GCTTGCTGAA GAGACTTGTT 180
 TTCTTCTTCT AAGACAGTGG TTTTGTTTTT TGGGTTTTTT TAAA 224

SEQ ID NO:3710

SEQUENCE LENGTH:223

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04368

SEQUENCE DESCRIPTION:

GATCTGGGCA GAATCCGCCA AGCGGCTGGG CCCAGGCTGT GGCATGATGN ACGGAGNAAN 60
 GAAGCACCTG GACTTCTAGG GATTCCTCCT TAGTCGCTGC ATGCAGAATT CTATGACACT 120
 CTAATNATGA TTGCTAATAG CTTATGTAAA TATTTNNTT AACAAATTGG NCCTNCACTC 180
 CTTNAAAAAC ACAAGGATTA TAAAATGGGT GCCNGCATTT NTN 223

SEQ ID NO:3711

SEQUENCE LENGTH:221

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04369

SEQUENCE DESCRIPTION:

GATCGTATTC NTNATAAACT ATTACCAGTA CAGTAGCTAG TAGATATNNT GTGACTGCCT 60
 CATTGTTTAT CTGCTGCTT TGGTCCCTAT GGCTCTAGTA TGAACATTCT CGTGTCTTCT 120
 GTGGAAATGA TTTCTGTGTT ATAGTTNCAN CTTNGGTAGA GGTGGGGATG ATTGTATTTT 180
 GTTTTAGTTG ACATCATTCT CAACTNTTAG AAATACTGTT N 221

SEQ ID NO:3712

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04370

SEQUENCE DESCRIPTION:

GATCAGTTTG CGAGTTTGA TGAGNTTGT AAGGTTTNTN TTTTACAAAC TATGAATCAG 60
 CAAATNTTGA AGATTGTACC ACATAGCAAA CATACAGCTG TTGAAAAATA ATGTATATAA 120
 AATGCATATA ATAAATATTA AATNGTGTAC CTGTATGTTA CTGTTGGCTA CATCATTTTG 180
 TGTTGAATAA TAAAGTGCAA TACNNCCCTT CTCCATAAA 219

SEQ ID NO:3713

SEQUENCE LENGTH:214

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04371

SEQUENCE DESCRIPTION:

GATCATTCTG TATATACATA TTTTAAATTA TGCAAGCAAA CTAGGAGGAG AATGTNCAAT 60
TTTAAGGGAT ACCTAATTTT CNTTCGGTTA GGGGATATTT TCCANCCTCT TGCTTTATAC 120
TCTGATATGG GGTGTNTTTA TGANCITTTT AATGTTATTT ANTCTATGCAG ATTTCCAATC 180
ANTGTATTGC NCATTTCTCTG ACAAANGGG NAAN 214

SEQ ID NO:3714

SEQUENCE LENGTH:215

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04372

SEQUENCE DESCRIPTION:

GATCCAAAAN ATAAACTTG AAGCTATTCT GGAACATAACA TGGAAAAATG AAATGGCTAT 60
TGTTTAAAAA AATGATAGAA ATACATTGTT GATGGGATAT GAGTTAAGTT TATTTTCTAC 120
AAACCTGTAA TTGATGACGG CATGGATAAT ATCTTCATGT TTCTGACNAG TAATCTGTAT 180
GTGGGGGGAG GGGATAATAA ATATTTCTAA CCAA 215

SEQ ID NO:3715

SEQUENCE LENGTH:335

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04373

SEQUENCE DESCRIPTION:

GATCAAAAAGT GAACACCCTG GCCTATCCAT TGGGGATACT GCAAAGAAAT TGGGTGAAAT 60
GTGGTCTGAG CAGTCAGCCA AAGATAACA ACCATATGAA CAGAAAGCAG CTAAGCTAAA 120
GGAGAAATAT GAAAAGGATA TTGCTGCATA TCGTGCCAAG GGCAAAANTG AAGCAGGAAA 180
GAAGGGCCCT GGCAGGCCAA CAGGCTCAAN GNAGAAGNAC GANCCAGNNG ATGAGGAGGA 240
GGAGGAGGAA GANGNAGATG AAGATGAGGA GGAAGAGGNT GAAGATGAAG AATAATTGGC 300
TATCCTTTAA ATGATGCGTG TGAATGTGT GTACN 335

SEQ ID NO:3716

SEQUENCE LENGTH:211

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04374

SEQUENCE DESCRIPTION:

GATCAAATGT GCTGCAGCTT TTGCAGAAAA CAACTCAGAA ACACAAAACC CCCCACAGC 60
TCAATTATTA TTTTTCAT GTTTCCTAC AAGAGCCAAG TAGCACCATG TACAGAAGAC 120
GCCTTTTTTT TTGGAATATT GAAATCGTTC TGCATGTAAA ATATGGGATA ATGACCTGTT 180
TATATTAAAA TTCTGATTAA ATTATCTGAA A 211

SEQ ID NO:3717

EP 0 679 716 A1

SEQUENCE LENGTH:390

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04375

SEQUENCE DESCRIPTION:

GATCAAGAAT TCTACCATCC CTTGGGTCTT TGTGTATAAA CAATGTATAA TACCAGGTAG 60
 ACTCAGTCTT TAAGATATTA GACAGTTTTT TTAGTCCATG GGNTNNNNAA TATAACATT 120
 AACTTTCCTA TAAGANTATT TTGGCTTTGT AATCTATAGC CTCAAATTGG TATTTATTAT 180
 GGNTTCACTA GACAAACAGC TGTTCCTTA TTGTNTTTN NCTTTAGTGT TTCTGATTG 240
 CTATCAGTAG CTGTTTTTAA AGCCGNCCAA GGNAATANT TATTGCAGT TTTTGAAGT 300
 CACTTTTGA GCCCTCATNC AAGCTCTCAT TGTGGNTGGG GAGGGATACC NTTTTGGTT 360
 GTTAAAGGC CTATNATTGG TTAAGGGCN 390

SEQ ID NO:3718

SEQUENCE LENGTH:235

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04377

SEQUENCE DESCRIPTION:

GATCTTAGAG CTGAGGAATT GGCCTCCCAA TCCGAACAGG TGTATAATC CTTTCTNAAT 60
 AGGTGTGTCT GTGGACCCAA TGTNAGGCT GTNCTGGTGT AAATGGTGAC ATATTGAGCT 120
 GGGGGGATGC TTTCGGGGTG GGGGGACTGG TTCCATTCCA TCAAAGGCC CTCCTGAGAG 180
 TCTATCCNGG GNCCCATTTG TTNAATTAA CAGGCCAGNA AAGANGGTG NTNNN 235

SEQ ID NO:3719

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04378

SEQUENCE DESCRIPTION:

GATCTCCTGA GCTCAGGCAA TCCGCCACC TCGCCTGTC AAAGTGCTAN GATTACAGGT 60
 GTGAGCCACC ATGGGTGGCA TCTTTAATAT AGATTATAA GGCCCNNTG TTATATATT 120
 NNAAAAATTC AAATTAAC TANATCCCA AATGTCCNT TTATTAATGA AGTATTTGT 180
 CANATGGATG TTTAAAGCT GTGTATGTN 209

SEQ ID NO:3720

SEQUENCE LENGTH:209

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04379

SEQUENCE DESCRIPTION:

GATCTAGGAT TACTCTGGAC CTCATTGGG TGTATGAGT ATCCACGAA GGCCAGACGC 60
 TGATTNATT TNCTCATTC CACAGATTGA CAAGGATAAG TCAGNNGTT GTAACTCTA 120
 GGTAGCAGAT GAGAAATAAT TCACTTAATA TCAGAAATAT TTNCCAAACA CTTTCCTNA 180
 TTTTCCTC TGANTAAATA GANANCCNN 209

SEQ ID NO:3721

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04380

SEQUENCE DESCRIPTION:

GATCCAAGGA ACGTTTGGGG TTTCCTAGGT GGGCCACATC CAATCAGTGG AAGGTCTTAA 60
 GAGCAAAANC TGAGGTTCCCT CAGAGAAGAA GGAAATGTTT TAAGACTTCA GCATCAATTC 120
 CTGCCTGAGT TTCTAGCCTG CTGGCCTGCT CTACAAATTT CAAGCTTGCT AGCCCTCACA 180
 NTCACATGAA TAAATTCCTT AAAATAAA 208

SEQ ID NO:3722

SEQUENCE LENGTH:208

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04381

SEQUENCE DESCRIPTION:

GATCCTTTCC CCATGGACAG TGACAGAGCA ACTGGGCCGC AATGGCATAG GCAGAAGAAA 60
 ATNTAATCAC TCTGGGGGTG ANTGGTGGTT AAAACGACTC ATGTAATTAT TTGGATTGTA 120
 ATTCNTTAC ACATATTTNT TTGCTTAACC CAGCATGTNA GATATATNAT NTAATCTAAT 180
 AAAAGATACA AACTTATGGG CACACAAA 208

SEQ ID NO:3723

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04382

SEQUENCE DESCRIPTION:

GATCACCTG GAGCTGTGGC TTCCCCGAGC AGCTGAGAGT GAAAGGAGGC AGTTCCTTTA 60
 CTGTGAGCTC TCACGGCAGC GTGCTCAGC CCCACACAGG GGCTGCCTTC ACTCGGCTTC 120
 AGCAGCNGTT GACTTTTAAA TCATAAAAAG CCGCTCTATA TACAGTTTAC TCTGTTGCTA 180
 GAAGGCAGTG GAACATAGGT ATTTAAA 207

SEQ ID NO:3724

SEQUENCE LENGTH:207

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04383

SEQUENCE DESCRIPTION:

GATCCACGTA CAGTTTGGAT TTTCCTTCTA GCCTTCATGT GTGGCCCAAG CATCTATTC 60
 AGACTGTCAT GGTGGCATT GTTCTCTGAG GTTCTGTCTT CCCTTCGTGT TTCTATGAGC 120
 TTTAATTTGT ATGGTTCTTG TTCTGTTAAT GCCACTAGGG ACTATGTATT CCTGATTCCA 180
 CCATGACAGC TACAGTAAAA CAGTAAA 207

SEQ ID NO:3725

SEQUENCE LENGTH:204

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04384

SEQUENCE DESCRIPTION:

GATCAAGCAG GCACTTCAAG CCTCAATAGG ACCAAGGTGC TGGGGTGTTC CCCTCCCAAC 60
CTAGTGTTCA AGCATGGCTT CCTGGCGGCC AGGNCTTGCC TCCNTGGACT ANCTGGGGGG 120
TTCCGGGTCT CAAGAAGACA AGGGTGCTGG NCCTCCCTAA GCCAAGGAGA GGANTAAAGA 180
CAAAAAGCTN AAAAAAAG GAAA 204

SEQ ID NO:3726

SEQUENCE LENGTH:202

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04385

SEQUENCE DESCRIPTION:

GATCTCGAAC TGTACCAAAA TACATGGAGA CTAACAAACA GAACCACATG GAACTTTCAA 60
ACTGAAAAAA AAATTTGTCA CAAAACTTT GTTGTCATAG TTAAGTTGAT TGTAGATGGT 120
AATTGAATAT ACTCCTTGA AAATATTTC TCAAGTATGT TTCCTGCTCA TTGTGATACA 180
TTAAAAAAA ANTATGGGCA AA 202

SEQ ID NO:3727

SEQUENCE LENGTH:219

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04386

SEQUENCE DESCRIPTION:

GATCCAGAAG GCTTACGAGT ATTTTATTAT CTTGTCCAGG ACCTGAAGTG TTTGGTCTTC 60
AGTCTTATTG GATTACACTT CAAGATTAAA CCAATCTAGA CTGAATATTG GTGTGGACAT 120
GGGGGGTGGG TGGGAGTAGA AAATTTTGTG TATATCAGGG CAGTATTTTT TTATGAACTA 180
TAAATGATTG TCTTTAATAA ATATGTGATA AAATCCAAA 219

SEQ ID NO:3728

SEQUENCE LENGTH:200

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04387

SEQUENCE DESCRIPTION:

GATCATATTT AGAGGATATA ACAATTAGAA ATCTAGAAAA TAATTATCAC TTTNATAAAA 60
TNTTNAGTCA ACTGTACAAA TAATTACATA AAACATCAAT TAATNATGCT TAAAAATCAC 120
TAATNTTCAT AATATATAAT CACTATTTGT AATCAAAAAGT TTAATTTTAT NTNAAAAAAT 180
AAAAAATGCT TACTTGGAAA 200

SEQ ID NO:3729

SEQUENCE LENGTH:198

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04388

SEQUENCE DESCRIPTION:

GATCAGCCGA ACTCTAGGGA CTTGGTGTG CTTGGAAGGC ATCCATACCT GCATTTTGCA 60
 TTCTTCGTAT GTAATCATAT TGCCAAAGAC AAATATTTC ATCATTATT GTAAATAACA 120
 CTTTTCCCA GACCTACCAT AAAGTTTCTG TGATGTATTG TCTTCAGTT GCAATAAAAA 180
 TTAGTGAGTT GCATCAAA 198

SEQ ID NO:3730

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04389

SEQUENCE DESCRIPTION:

GATCTAAGAT TAATTCCTCA ACTGTTTTGC ACTCAACAAA GACATACCTC TGAGTTGGCA 60
 ACCAGCAGGG TGGATAACGG GCCAGTGGTG ATAAATCAA AGAATAGGTA ATGAAACAAT 120
 CATCCAGTTA ACAATCAGCA AGGTTCCTCA GAGCCTAATT AATGTTAAT TCTAAATAAA 180
 TTGCAACAAT TAAGAAA 197

SEQ ID NO:3731

SEQUENCE LENGTH:197

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04390

SEQUENCE DESCRIPTION:

GATCCAAAAG TTAAATTAG TGCATACATC ATGTCATTTC ACCTCCTGTT CCTAGGAACT 60
 CTCCATTCCC AAGCATTGCC AGTGTTCCTC AGATAATCTT AGCTGTTGTC TTGTGCTGTG 120
 GAAATGGAAG AAACCATCTT CACAGACTGT AGGAGAATTC AACATATAAT TTCTTAATAA 180
 ATACTGTTTC TTTTAAA 197

SEQ ID NO:3732

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04391

SEQUENCE DESCRIPTION:

GATCTAAGGG AGTCCACTAT CTGTGCAATT GTATTGGNT TTTTTTGCA CTGTTTCAAT 60
 GCTGGTAATT GAAACCATTT TAATATATTT GGTGTATTC ACTTTATATG TCCTTCCAAA 120
 AATNTTGTG TGTACAAACC ATGNNNNNGA ATGTTGGCTT CCAAGTTTTT AAATAAGAAA 180
 CTTTTGTAT TTAAA 195

SEQ ID NO:3733

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04392

SEQUENCE DESCRIPTION:

GATCCACGGA GCAGAGGTCA TCTGTCCCA GCTTGGCCA CTGAGGCCAG CATGGNTGGG 60
CCCAGGATGC TTGTCTCTCA GCTCCCATCC TGTGTACTTC CACATTGGTT TAACCAGAGG 120
AAAACCGAAA TCTACAATTG TNATAAACAC ATTTAAATGT GCGTAGAATC AGCCATACAA 180
ATTGTGAAAC ATAAA 195

SEQ ID NO:3734

SEQUENCE LENGTH:195

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04393

SEQUENCE DESCRIPTION:

GATCAACTCC CCCAAGGCC GAAAGGTGCT GCATACCACG TACCANAGCC AGGAGCGTGG 60
CACACACAGC CTGGACATCA AGTGGTGAAG TNAGGCCAGG GNCTTCCAGC TGCTCTTGGG 120
GCCAGAGCCA AGAGCCTCTN AGTAGAGGGA GGGGCTGCC TGAGTGGAGT ATTAAGACA 180
CTTAAGAAAA CAAA 195

SEQ ID NO:3735

SEQUENCE LENGTH:193

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04394

SEQUENCE DESCRIPTION:

GATCCTGTGC CTAGGAGCA CTAGGAAGA CTGCTCCAT CTCCGCCGC ATATCTGGGG 60
CACCAAGAGA GACAGAGTCG TGAGCCAGGC TCGCCTCATT CCTCGTCTTG GGAGAACCGG 120
ACCAACTTCC CAAAAGGCC TTGCCGTGCA GAATTGGCCT GGTTAATAA AGAACAGACC 180
TGNCCCAAGN AAA 193

SEQ ID NO:3736

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04395

SEQUENCE DESCRIPTION:

GATCTGGCCC TCCCAGAAC AATCTGGATT TCACGGAGAC AGCAACCAGA AGTTAAACCA 60
TGTGACTAAA AATGCATCTG GCTACTTTT CATGTATGTA TGAGACAGAA ACTAATCCTT 120
ACTATCTAT TAGGATACCA CTTTTCATTG CAAAGTTTGT GTCAATAAAG TCATTAATTT 180
TAAACATAAA 190

SEQ ID NO:3737

SEQUENCE LENGTH:190

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04396

SEQUENCE DESCRIPTION:

GATCATAAGT AGTGGAGGAT TTAACCAG GCTGGCTGGC TCTTAAGGCC TATGCTCTTA 60
ATTNACCATG TNGAATTAAT TTACCATATT GAATTACACT TATGTNCACC AAGTNAGGCA 120
TTTNGGCAGC CATTGTTTAC GTTTTANTTT TGAATAATT TAGAAAAGTT ACCAGAGTAA 180
TATGAAAGCN 190

SEQ ID NO:3738

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04397

SEQUENCE DESCRIPTION:

GATCCTCCGC ATCCCGTGCG AGGAAGAAGA TGTGGAGATG AGTGAGGACG CCTACACGGT 60
GCTGACCCGC ATCGGGCTGG AGACGTCACT GCGCTACGCA NNNNGCTCA TCACAGCTGC 120
CAGCTTGGTG TGCCGGAAC GCAAGGGTAC AGAAGTGCAG GTGGATGACA TCAAGCGGGT 180
CTNNNNN 187

SEQ ID NO:3739

SEQUENCE LENGTH:187

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04398

SEQUENCE DESCRIPTION:

GATCTGCCCC TAACTTGAA ATACCTCCTG CTCCTTTGGG GACTGGNCTT TGCNAAGAGC 60
ACCTGGGGAG GAGACTGGTG CTAACCTAAGC CAGTAAGTAA GTCCACTCTT TGGNTGCAGC 120
TGGTGAAGG TCTACCCATA CCTTTTATT TNCAGTGTTC AATAAANTC CAGTNGGCAA 180
AGACAAA 187

SEQ ID NO:3740

SEQUENCE LENGTH:186

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04399

SEQUENCE DESCRIPTION:

GATCAAGTTC TGCGNCTGAN GAGGCTGCCA AAAGTCAAAA GNGGGGCCTG GGAAGGCAAG 60
CTCATTCCCTC ACAACGGCCT TTCCAGGCCC NGTTTTTCCC TTCCGGCAGC CTCTTGGCCT 120
CTAATTTGTT TATCTNTNGT GTATAAATCC CAAAATATGG AATTTTGAA TATTCCACC 180
ATTAAA 186

SEQ ID NO:3741

SEQUENCE LENGTH:185

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

EP 0 679 716 A1

CLONE:HUMGS04400

SEQUENCE DESCRIPTION:

5 GATCTGCCTT CCGCTGAAA CTTGTTCCAC CTCAGTCCCC TCATCTGTCA CACGCATGTG 60
GGGTGGAGTA GGGAGATGCG GGGAGCAGGG TGGGCAGGAA TACTGTTATC TATGTNACGG 120
GGCAGTCGTG AGGCTGAGAT GAGAATGCGG ATTAATATGC CTGGCGTGCT CACCGTAACA 180
CCAAA 185

10 SEQ ID NO:3742

SEQUENCE LENGTH:182

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04401

15 SEQUENCE DESCRIPTION:

GATCCCATCT NTACAANAAA CTTAAAAATT AGCCAGGCAT GATGGCACAT TCCTGTAGTC 60
CTAGCTACTC AGGAGGCTAA GGTAGGAGGA TTGCCTGAGC CCAGGAGTTC AAGGCTGCAG 120
TGAGCTAAGA ACGTGCCAGT ACACTCCANC NNGAGCCACA AAGTGAGACC CTGTCTCGCA 180
20 AA 182

SEQ ID NO:3743

SEQUENCE LENGTH:180

25 SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04402

SEQUENCE DESCRIPTION:

30 GATCAAAGTG GTAAAGACAA TGTAAAAATT AACATTTTAA TACTGATGTT GTAACTGTT 60
TNTACTTAAC ATTTTGGGAA GTAAGTGCCT CTGACTTCAA CTCAAGANAA CACTTTTTTG 120
TTGCTAATGT AATCGGTTTT NGTAATGGCG TCAGAAATAA AAGGATGCTT ATNATTCAA 180

SEQ ID NO:3744

35 SEQUENCE LENGTH:179

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04403

40 SEQUENCE DESCRIPTION:

GATCTNCGGA ATGATGAGCA CACAAGGCGG GAGCTAGCCA AGATGAAGCA GGNCCCGGTG 60
AACCTGAAGA AGGCAGAGAT ATGGCAAACA GGATTNGCGC TTTTGGNNAC ATGGAGTGTT 120
CAGCAAAGAC CAAAGATGGA GTGAGAGAGG TTTTNAAT GGCTACGNGA NCTGCTCTN 179

45 SEQ ID NO:3745

SEQUENCE LENGTH:178

SEQUENCE TYPE:nucleic acid

TOPOLOGY:linear

CLONE:HUMGS04404

50 SEQUENCE DESCRIPTION:

GATCTGAGTG CCTCAAGATG GTTTTCAAAA AAATTTTTTT AAAGAAAATA ATTGTATACG 60

55